

In the United States Court of Federal Claims

No. 05-448C

(Filed: July 16, 2012)*

***OPINION ORIGINALLY FILED UNDER SEAL ON JUNE 27, 2012**

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RAYTHEON COMPANY,

Plaintiff,

v.

THE UNITED STATES,

Defendant.

Contract Disputes Act (“CDA”) claims;
* Cost Accounting Standards (“CAS”)
* segment closing adjustments, 48 C.F.R. §
* 9904.413-50(c)(12); Segment closing
* adjustments not barred by standard FAR
* 42.1204(i) form novation agreement absent
* express language otherwise; CAS 413-
* 50(c)(5) requires “readily determinable
* data” and assumptions supported by facts;
* Portions of segments are not themselves
* segments under CAS 413-30(a)(19);
* Jurisdiction over government claims for
* equitable adjustments and set-offs is lacking
* without a final contracting officer’s decision
* under 41 U.S.C. § 605(a).

* * * * *

Karen L. Manos, Washington, DC, for plaintiff. *John W.F. Chesley* and *Greta B. Williams*, Washington, DC, of counsel.

C. Coleman Bird, U.S. Department of Justice, Washington, DC, with whom were *Acting Assistant Attorney General Stuart F. Delery*, and *Jeanne E. Davidson*, Director, for defendant. *Jeffrey A. Regner*, U.S. Department of Justice, Washington, DC, and *Lawrence S. Rabyne*, Defense Contract Management Agency, Arlington Heights, IL, of counsel.

Richard D. Bernstein, Washington, DC, for *amicus curiae* General Electric Company. *Mei Lin Kwan-Gett* and *Howard Stanislawski*, Washington, DC and *Alan C. Brown*, McLean, VA, of counsel.

POST-TRIAL OPINION

FIRESTONE, *Judge*.

I. Background

This case involves Contract Disputes Act (“CDA”) claims totaling \$69,320,563.94 by plaintiff Raytheon Company (“Raytheon”) against defendant the United States (“government”) related to Raytheon’s sale of certain business segments and the retention of assets and liabilities associated with the “defined benefit” pension plans¹ of those segments. The segment sales occurred after the 1995 revisions to the Cost Accounting Standards (“CAS”) for Composition, Measurement, Adjustment, and Allocation of Pension Costs. 60 Fed. Reg. 16,534 (Mar. 30, 1995) (codified at 48 C.F.R. pts. 9903 and 9904²). The segments at issue are (1) Aircraft Integrated Systems (“AIS”); (2) Optical Systems (“Optical”); (3) Aerospace Division (“Aerospace”); and the alleged segment (4) Printed Wire Fabrication (“PWF”).³ Pursuant to CAS 413-30(a)(20) the sale of each segment resulted in a “segment closing.”⁴ Under the requirements of CAS 413-

¹ A defined benefit pension plan is one “in which the benefits to be paid or the basis for determining such benefits are established in advance and the contributions are intended to provide the stated benefits.” 48 C.F.R. § 9904.412-30(a)(10).

² Except as otherwise provided, the court will cite 48 C.F.R. pt. 9904 as “CAS.”

³ As discussed in further detail *infra* Part III.C., one of the questions presented in this case is whether PWF was a “segment” as defined by CAS 413-30(a)(19). CAS 413-30(a)(19) provides, in relevant part:

Segment means one of two or more divisions, product departments, plants, or other subdivisions of an organization reporting directly to a home office, usually identified with responsibility for profit and/or producing a product or service.

Id.

⁴ Segment closing means that a segment has (i) been sold or ownership has been otherwise transferred, (ii) discontinued operations, or (iii) discontinued doing or actively seeking Government business under contracts subject to this Standard.

50(c)(12), each segment closing required Raytheon to calculate an adjustment of previously-determined pension costs—known as a “segment closing adjustment”—for each segment’s defined benefit pension plan or plans.⁵

In Allegheny Teledyne, the Federal Circuit explained the basic concepts for determining pension costs and for conducting segment closing calculations as follows:

CAS 412[] governs how a contractor determines its pension costs for each period-by the contractor’s best actuarial estimate of the plan’s anticipated earnings and benefit payments, taking into account the plan’s past experience and reasonable expectations. . . . [CAS 413] provides for two related types of adjustments to a contractor’s pension costs: (1) adjustments to account for the pension plan’s actuarial gains and losses and (2) adjustments to account for a closed segment’s pension surplus or deficit. Under normal circumstances, the actuarial gains or losses (differences between the estimates and actual experience) are amortized in equal annual installments over a fifteen-year period. This is not the case, however, when a “segment closing” occurs. . . . In the event a contractor closes a segment, . . . CAS 413 provides that a contractor . . . shall determine the difference between the actuarial liability for the segment and the market value of the assets allocated to the segment. . . . The difference between the market value of the assets and the actuarial liability for the segment represents an adjustment of previously-determined pension costs.

Allegheny Teledyne Inc. v. United States, 316 F.3d 1366, 1371 (Fed. Cir. 2003)

(“Allegheny Teledyne”), cert. denied sub nom. Gen. Motors Corp. v. United States, 540

CAS 413-30(a)(20) (emphasis added).

⁵ If a segment is closed, if there is a pension plan termination, or if there is a curtailment of benefits, the contractor shall determine the difference between the actuarial accrued liability for the segment and the market value of the assets allocated to the segment, irrespective of whether or not the pension plan is terminated. The difference between the market value of the assets and the actuarial accrued liability for the segment represents an adjustment of previously-determined pension costs.

CAS 413-50(c)(12) (emphasis added).

U.S. 1068 (2003) (citations and internal quotation marks omitted); Gates v. Raytheon Co., 584 F.3d 1062, 1065 (Fed. Cir. 2009) (“Gates”) (“[W]hen a business segment is closed, the contractor must calculate both the market value of the assets in the pension plan allocated to the segment and the actuarial accrued liability for the segment. The difference between the plan’s assets and liabilities indicates the amount by which the plan is over- or under-funded.”) (citation omitted).⁶ Arithmetically, the difference representing the adjustment may be positive, negative, or zero. As a practical matter, the results of these calculations, based on complex actuarial assumptions and the frequent swings of market investments, is rarely, if ever, zero. If the difference is positive, the government may be entitled to a share of the surplus from the contractor. See CAS 413-50(c)(12)(vi).⁷ If the difference is negative, the contractor may be entitled to a share of

⁶ Allegheny Teledyne dealt with segment closings under the original CAS 413, which was issued by the CAS Board in 1977 and became effective in 1978. Gates dealt with segment closings under the amended CAS 413. The Federal Circuit has explained the changes in the amended CAS 413 as follows:

In 1995 the new Board (created in 1988) amended CAS 413. The amendments were a part of several changes to the regulatory framework brought about by concerns about over-funded pension plans. 60 Fed. Reg. 16,534, 16,534-35 (Mar. 30, 1995). The amendments made two significant changes. First, they specifically defined “segment closing.” 48 C.F.R. § 9904.413-30(a)(20) (1995). Second, they added a specific formula for allocating a pension surplus or deficit between the contractor and the government. Id. § 9904.413.50(c)(12).

Allegheny Teledyne, 316 F.3d at 1371. This case involves segment closings under the amended CAS 413.

⁷ The Government’s share of the adjustment amount determined for a segment shall be the product of the adjustment amount and a fraction. The adjustment amount shall be reduced for any excise tax imposed upon assets withdrawn from the funding agency of a qualified pension plan. The numerator of such fraction shall be the sum of the pension plan costs allocated to all contracts and subcontracts (including Foreign Military Sales) subject to this Standard during a period of

the deficit from the government. See id. In either event, the end goal pursued by both the government and the contractor is to settle-up and pay their fair shares to ensure that the pension plans at issue are fully-funded to meet the promises made to the employee-participants covered by the pension plans. “In short, the Government and contractor terminate the amortization and adjust the outstanding pension obligations by allocating any then-existing surplus or deficiency between them.” DIRECTV Grp., Inc. v. United States, 670 F.3d 1370, 1373 (Fed. Cir. 2012).

All of the sales at issue in this case were part of a corporate restructuring program that Raytheon began in 2000.⁸ Several other segment sales that occurred during that period involved pension surpluses, and Raytheon paid the government for the surpluses attributable to the government’s contributions.⁹ In this case, Raytheon is seeking to recover alleged pension deficits attributable to government work that were identified by

years representative of the Government’s participation in the pension plan. The denominator of such fraction shall be the total pension costs assigned to cost accounting periods during those same years. This amount shall represent an adjustment of contract prices or cost allowance as appropriate. The adjustment may be recognized by modifying a single contract, several but not all contracts, or all contracts, or by use of any other suitable technique.

CAS 413-50(c)(12)(vi).

⁸ Throughout this period, Raytheon relied upon Mercer Human Resource Consulting (“Mercer”), an outside actuary firm, to prepare its pension work, including its CAS 413 segment closing calculations. Previously known as William & Mercer and Mercer Consulting Group, Mercer is an international benefits consulting firm that provides actuarial services and human resource consulting to clients. Tr. 673 (Winer).

⁹ Raytheon paid the government in connection with the surplus segment closings resulting from the sale of the Raytheon Engineers & Constructors (“RE&C”), Semiconductor, and Montek Aerospace (“Montek”) segments. Tr. 46-47, 74-75 (Murphy). A dispute over the interest calculations for the surplus payment in RE&C and Montek was the subject of the Federal Circuit’s decision in Gates. 584 F.3d at 1065-66.

Raytheon in its segment closing adjustments associated with the AIS, Optical, PWF, and Aerospace sales.¹⁰

In particular, Raytheon seeks \$56,274,371.39 from the government in connection with sale of the AIS segment; \$8,693,533.76 from the government in connection with the sale of the Optical segment; \$2,933,151.69 from the government in connection with the sale of the Aerospace segment; and \$1,419,507.10 from the government in connection with the sale of the alleged PWF segment. Following review by the Defense Contract Management Agency (“DCMA”) and the Defense Contract Audit Agency (“DCAA”), the contracting officer denied Raytheon’s claims on the grounds that Raytheon had not paid the pension deficits it sought to recover from the government for the employees that remained within Raytheon’s pension plans.

The court has issued two prior opinions in this case ruling on motions for partial summary judgment and summary judgment under Rule 56 of the Rules of the United States Court of Federal Claims (“RCFC”). In its first opinion, ruling on cross-motions for partial summary judgment, the court held that Raytheon’s post-retirement benefit (“PRB”) costs are not “pension costs” within the meaning of CAS 412-40(a), and cannot be included in the segment closing adjustments at issue in this case. See Raytheon Co. v. United States, 92 Fed. Cl. 549 (2010) (“Raytheon I”).

¹⁰ As described in greater detail below, the government had originally contemplated offsetting surplus segment closing adjustments with deficit segment closing adjustments. However, when the government determined that it could not follow through with that offset plan, Raytheon paid the government its share of the surplus segment closing adjustments. Raytheon now seeks to recover the government’s share of the deficit segment closing adjustments.

In its second opinion, the court addressed the government's motion for summary judgment on a series of issues, including the government's argument that Raytheon waived and transferred its claims for the Optical and AIS segment closing adjustments under the terms of the novation agreements entered into with Raytheon, the government, and the purchasers of each segment. Raytheon Co. v. United States, 96 Fed. Cl. 548 (2011) ("Raytheon II").¹¹ The court denied the government's motion with respect to the novation agreements, finding that a genuine issue of material fact existed as to whether the conduct of the parties was sufficient to vitiate the waiver language in those novation agreements.

This third opinion follows the trial that was conducted in two phases over the course of eleven days in October and November 2011. In the first phase, the court heard testimony and received evidence regarding the issues surrounding the novation agreements. The second phase of the trial focused on the appropriateness of the various methods, assumptions, and calculations used by the parties in performing a post-1995 CAS 413 segment closing adjustment. The court heard live testimony from 21 witnesses

¹¹ Declining the parties' invitations to revisit prior rulings in earlier CAS 413 cases on three additional issues, the court also held: 1) the funding requirements of the Federal Acquisition Regulations ("FAR") and CAS do not bar Raytheon's segment closing adjustment claims; 2) the FAR's Limitation of Cost and Limitation of Funds clauses do not limit Raytheon's claims, because the CAS 413 segment closing adjustment represents an adjustment of previously determined pension costs and does not increase contract-specific costs; and 3) the government is entitled to an equitable adjustment to the extent that application of the amended CAS 413 results in the government owing more under the amended CAS for pension costs than it would have owed under the original CAS. See Raytheon II, 96 Fed. Cl. at 552, 554-55 (citing Gen. Motors Corp. v. United States, 66 Fed. Cl. 153 (2005) and Viacom, Inc. v. United States, 70 Fed. Cl. 649 (2006)). As discussed *infra* Part III.A.4.b., the court's ruling on the government's claim for an equitable adjustment has been modified to reflect the undisputed fact that the government never obtained a contracting officer's decision on its claim.

and allowed 194 exhibits into evidence. Closing arguments were heard on February 16, 2012, following post-trial briefing.

A summary of the testimony and evidence introduced at trial and the court's findings of fact and conclusions of law for each segment are separately addressed below, starting with the AIS and Optical novation agreement issues and then proceeding with the segment closing calculations for each segment.

II. The AIS and Optical novation agreements did not act to waive and transfer Raytheon's CAS 413 segment closing claims

A. The AIS novation agreement

1. Testimony and evidence presented on the formation of the AIS novation agreement

AIS was established as a segment on January 1, 1999 from a consolidation of various businesses that Raytheon had previously acquired between 1995 and 1997: E-Systems, Inc. ("E-Systems"), Chrysler Technologies Airborne Systems ("CTAS"), and Texas Instrument ("TI") Systems. Pl.'s Ex. ("PX") 19.0002. The AIS segment was sold to L-3 Communications Integrated Systems ("L-3") on March 8, 2002. Id. By the terms of the asset purchase agreement between Raytheon and L-3, Raytheon retained the pension plan assets and actuarial accrued liabilities for AIS. See PX 41.0112 ("The Sellers shall retain all liability and responsibility for the defined benefit pension plans maintained by Sellers in which Transferred Employees participate as of the Closing"). In connection with Raytheon's sale of AIS, the government, Raytheon, and L-3 entered into a novation agreement ("AIS novation agreement") on or about November 11 through November 14, 2003 with an effective date of March 8, 2002. PX 347; Def.'s Ex.

(“DX”) 109. The AIS novation agreement recognized the transfer of certain open government contracts from Raytheon to L-3. Id. The AIS novation agreement was modeled on the FAR 42.1204(i) form novation agreement. The standard text of FAR 42.1204(i)(b)(1) (“clause (b)(1)”), included in the agreement, reads as follows:

(b) In Consideration of These Facts, the Parties Agree that by this Agreement:

(1) The Transferor confirms the transfer to the Transferee, and waives any claim¹² and rights against the Government that it now has or may have in the future in connection with the contracts.

AIS novation agreement; see also FAR 42.1204(i)(b)(1).

The government contends that this waiver and release bars Raytheon’s CAS claim for \$56,274,371.39 from the sale of the AIS segment. Raytheon argues that the subject waiver and release does not extend to CAS claims. If the court finds that it does, then Raytheon argues the parties’ actions demonstrate that the contract language should be reformed to exclude CAS claims because the parties did not intend to include those claims or that the parties’ actions subsequent to the execution of the novation agreement vitiated the waiver with regard to those claims.

At trial, Raytheon presented testimony and evidence on the formation of the AIS novation agreement from John McGrath (DCMA Raytheon Corporate Office Defense

¹² The AIS novation agreement contains this one deviation from the FAR form novation agreement in clause (b)(1), where “claim” is written in the singular rather than the plural “claims.” This deviation does not materially impact the court’s decision.

Corporate Executive (“DCE”)¹³ beginning April 2002¹⁴ and government signatory to the AIS novation agreement), Rodger Christiansen (DCMA corporate contract specialist who focused on Raytheon’s corporate restructuring activities and who was involved in the preparation of the AIS novation agreement for the government), Daniel Dowd (DCMA corporate cost analyst who focused on Raytheon’s compliance with the CAS), James Schepley (involved in the formation of the AIS novation agreement for Raytheon), James “Vincent” McKenzie (involved in the formation of the AIS novation agreement for Raytheon), John Harris (Raytheon’s signatory to the AIS novation agreement), Michael Garvey (Raytheon’s Director of Benefits Finance from 2000 through May 2003), Deborah Tully (Raytheon’s Director of Benefits Finance beginning in May 2003), Terence Murphy (Raytheon’s Assistant Controller for Government Accounting and its primary interface with the DCMA’s Raytheon Corporate Office), and Robert Cann (Raytheon’s Manager of Government Accounting until he succeeded Mr. Murphy as Assistant Controller for Government Accounting in February 2005). Through this testimony and accompanying exhibits, Raytheon sought to establish that 1) all of the parties understood that the AIS novation agreement did not encompass Raytheon’s segment closing claims because the only purpose of the novation agreement was to transfer performance responsibility for the contracts specified in the standard attachment

¹³ As the DCE, Mr. McGrath was responsible for overseeing Raytheon’s compliance with governmental regulations, including CAS 413. See infra Part II.A.1.a. In this capacity, Mr. McGrath was the contracting officer responsible for issuing a decision on Raytheon’s CDA claims for the government’s share of any segment closing pension deficits. See infra Part III.

¹⁴ Herbert Homer was the DCE until his death on September 11, 2001. Mr. Christiansen and Mr. Dowd served as Acting DCEs between September 2001 and April 2002. Tr. 1165 (Dowd); Tr. 1317 (Christiansen).

to the novation agreement, and 2) nothing in the waiver in clause (b)(1) of the AIS novation agreement altered the purpose or scope of that agreement. Raytheon alternatively sought to establish that the continued negotiations regarding the AIS segment closing adjustments after Raytheon's execution of the AIS novation agreement vitiated any waiver of the CAS claims.

The government sought to show through these same witnesses¹⁵ that 1) Raytheon had failed to adduce any new evidence requiring reformation of the contract, because the testimony indicated that the parties had intended to and did successfully adhere to the FAR form novation agreement, and that therefore the court need not reconsider its prior ruling in Raytheon II that the plain language of clause (b)(1) encompasses CAS segment closing claims, and 2) none of the testimony demonstrated that a certified CAS claim had been made by Raytheon prior to the execution of the AIS novation agreement, and therefore the waiver could not have been vitiated by later consideration of Raytheon's CAS claim by the government's contracting officer.

The testimony and evidence received regarding the relationship between the AIS novation agreement and Raytheon's AIS segment closing claim is summarized below.

a. John McGrath

The parties presented the testimony of Mr. John McGrath—the government signatory to the AIS novation agreement—who testified regarding his involvement with the preparation and signing of the AIS novation agreement. Mr. McGrath testified that he

¹⁵ Pursuant to pre-trial stipulations, the witnesses called by both parties testified first for Raytheon and then for the government.

worked for the DCMA from 1984 to 2006, and was assigned to Raytheon throughout his time with the DCMA. Tr. 1316.¹⁶ Among his duties as a DCE, Mr. McGrath was responsible for overseeing Raytheon's compliance with governmental regulations, including CAS 413. Tr. 1318. Mr. McGrath testified that as a DCE he had the final authority for determining CAS compliance or noncompliance and for citing and resolving CAS violations. Tr. 1319. He was also responsible for novation agreements that were executed at the corporate level. Tr. 1319. As a DCE, Mr. McGrath was supported by three corporate price analysts, including Mr. Christiansen and Mr. Dowd. Tr. 1319-20.

In connection with the multiple Raytheon segment closings that took place in the early 2000s, including the AIS segment closing, Mr. McGrath testified to informal daily meetings held with his four person team, which at times included discussion of both CAS 413 issues under the purview of Mr. Dowd and corporate restructuring issues (including advance agreements¹⁷ and novation agreements) under the purview of Mr. Christiansen. Tr. 1321-22. These meetings were designed to ensure that the members of the team would generally be aware of the issues being handled by other members of the team. Id. Mr. McGrath further testified to attending regular bi-weekly "Open Items" meetings with Mr. Garvey and later Mr. Murphy from Raytheon. Tr. 1323-25. These meetings

¹⁶ During his twenty-two year career with the DCMA, Mr. McGrath served as a supervisory cost and price analyst, a contracting officer, a systems contracting officer, a divisional administrative contracting officer ("DACO"), a principal administrative contracting officer, and a DCE. Tr. 1317-18. Mr. McGrath also holds a master's degree in Public Administration and received training during his time at the DCMA on the CAS, including CAS 413. Tr. 1318.

¹⁷ Advance agreements may be entered into between the government and a contractor prior to the incurrence of the costs involved in a contract and serve to express the parties' understanding and avoid possible subsequent disputes or disallowances. See FAR 31.109.

included discussions of the AIS CAS 413 segment closing issues. Id.¹⁸ Mr. McGrath testified that he was aware during his tenure as DCE that Raytheon retained the pension plans after the divestiture of AIS. Tr. 1336. Mr. McGrath further testified to receiving a letter dated July 12, 2002 in which Raytheon identified a \$69,814,038 deficit for the AIS segment closing adjustment. Tr. 1337.

Mr. McGrath also attended a December 4, 2002 meeting at the DCMA's L-3 headquarters in New York. Tr. 1339-40. At this meeting, individuals from the DCMA and the DCAA responsible for reviewing all aspects of the sale of AIS from Raytheon to L-3 discussed topics including the AIS novation agreement and the CAS 413 segment closing. Id. No participant at that meeting mentioned that Raytheon may have waived or may have been about to waive its CAS 413 segment closing claim by virtue of the AIS novation agreement. Id. Following the New York meeting, Mr. McGrath sent an e-mail to Raytheon on December 9, 2002, stating that he was still considering government participation in Raytheon's deficit segment closings, which then included a plan to settle all CAS 413 segment closings to the maximum extent by offsetting deficit and surplus

¹⁸ As explained by Mr. Terrence Murphy, Raytheon's Assistant Controller for Government Accounting from 2000 to 2005, Open Items meetings were typically attended by representatives from Raytheon, the DCMA, and the DCAA. Tr. 47-48. Raytheon would prepare the list of the open items needing government or Raytheon action for the government's review. Tr. 48. The items would be logged with dates and comments as to their current state as well as a column stating whether the action required was a DCAA action, DCMA action, or Raytheon action. Tr. 48. The government had an opportunity to add or change items on the list. Tr. 48-49 ("The process was that we would have a meeting one week, and after that we would mark up the changes that we had. We'd ask the government to do the same. They would send it back to us, and my organization actually finalized and printed up the documents. We would send it out in advance of the meeting to the government so when we sat down we had a current version of the items. . . . [T]he purpose of the meeting was to be able to sit down in that small group and go over what was the process and how we were going to close these items out.").

segment closings. Tr. 1341-42; PX 331.¹⁹ At a December 13, 2002 Open Items meeting, the AIS segment closing was on the agenda, but waiver of AIS segment closing claims by virtue of a novation agreement was not discussed. Tr. 1345-46; PX 389. Mr. McGrath further testified that from January 2003 until September 30, 2004, the DCMA and the DCAA put a significant amount of time and effort into researching Raytheon's deficit calculations for its CAS 413 segment closing for the AIS segment. Mr. McGrath testified that he would not have requested this expenditure of resources had he known the government was going to deny Raytheon's request for government participation by virtue of the novation waiver clause. Tr. 1347-48.

Sometime between November 11, 2003 and November 14, 2003, while considering Raytheon's CAS 413 segment closing adjustment proposal for AIS, Mr. McGrath signed the AIS novation agreement on behalf of the government. Tr. 1329, 1376-77; PX 347.0003. Mr. McGrath testified that he did not believe when he signed the novation agreement that Raytheon had waived its CAS 413 claims under clause (b)(1), nor had anyone from the government, outside of this litigation, ever suggested to him that novation agreements affect CAS 413 claims. Tr. 1377, 1379. Mr. McGrath testified to his understanding of the purpose of the AIS novation agreement as follows:

To me, . . . the novation agreement did three things. It transferred contracts and it determined that the buying company had the technical capability and the financial capability to perform the contracts. It never dawned on me that there was a waiver in that novation agreement.

Tr. 1378.

¹⁹ As discussed supra note 9, these sales were part of an overall divesting strategy of Raytheon which included segments that had pension surpluses.

On December 1, 2003, Mr. McGrath sent another e-mail to Raytheon indicating that while he was still of the view that CAS 413 surpluses and deficits should be offset against one another, he had been informed by DCMA counsel, Mr. Brian Kingston, on November 19, 2003 that he would not be able to offset surpluses and deficits. . Tr. 1362-64; PX 335. This represented a change in the DCMA's position. Id.²⁰ Despite the change in position on offsets, Mr. McGrath still intended to grant Raytheon's request for government participation in the AIS segment's deficit. Tr. 1365; PX 335 ("[F]or all situations where the Government has a liability to Raytheon, it is still my intention to adjust final rates to reimburse Raytheon for these amounts."). At the December 11, 2003 Open Items meeting following execution of the AIS novation agreement, the AIS segment closing was on the agenda, though waiver of AIS segment closing claims by virtue of the novation agreement was not discussed. Tr. 1365-66; PX 408.0003. Again, at the February 12, 2004 Open Items meeting, the AIS segment closing was on the agenda, and Mr. McGrath was still considering Raytheon's request for government participation in the AIS segment's deficit. Tr. 1366-68; PX 410.0003. And again, at the June 10, 2004 Open Items meeting, the AIS segment closing was on the agenda, and Mr. McGrath was still considering Raytheon's request for government participation in the AIS segment's deficit. Tr. 1368; PX 412. Waiver of CAS claims under the novation agreement was never discussed at these meetings. PX 408; PX 410; PX 412; Tr. 1366-68.

²⁰ Mr. Kingston was the counsel advising Mr. McGrath on both the CAS 413 issues and the novation agreement. Tr. 1363-64.

In July 2004, the DCMA and the DCAA issued a Joint Guidance regarding CAS 413 segment closing adjustments based on the ruling of the Court of Federal Claims in Teledyne, Inc. v. United States, 50 Fed. Cl. 155, 178 (2001) (“Teledyne”) and the Federal Circuit’s ruling in Allegheny Teledyne. Tr. 1369.²¹ Based upon the Joint Guidance, Mr. McGrath denied Raytheon’s request for government participation in the AIS CAS 413 segment closing deficit on September 30, 2004. Tr. 1368-69. Mr. McGrath disallowed the pension costs, because under the Joint Guidance, quoted supra note 21, Raytheon had failed to fund the AIS pension by the amount of the claimed deficit by the federal tax deadline for the year of the segment closing. Tr. 1370; PX 299. Mr. McGrath did not cite the novation agreement as a reason for the disallowance. Tr. 1370-71.

Following receipt of the September 30, 2004 letter, Raytheon submitted an updated segment closing calculation and a demand for a contracting officer’s final decision to Mr. McGrath. PX 19. Mr. McGrath denied Raytheon’s CAS 413 segment closing claim for AIS on March 7, 2005. Tr. 1372-73, 1376; PX 20. The principle reason for denying the claim was again based on the failure to fund the pension costs in

²¹ This document, dated July 23, 2004, is found in DX 114 and is called the “DCMA/DCAA Joint Guidance Implementing the Teledyne Decision on CAS 413(50)(c)(12) Segment Closing Adjustments” (“DCMA/DCAA Joint Guidance”). In relevant part, the DCMA/DCAA Joint Guidance provides as follows with respect to pension deficit situations:

When there is a segment closing deficit, the Government’s share of the deficit is an allowable cost only if the contractor has funded it no later than the contractor’s Federal income tax deadline for the year of the segment closing (including extensions) in accordance with FAR 31.205-6(j)(1)(i) and (j)(2)(i)(A). Therefore, any portion of a segment closing deficit not funded by such time should be disallowed.

Id.

the current tax year. Tr. 1373; PX 20 (“Because Raytheon did not fund what it proposes as [the] Government’s share of the AIS deficit in the year of segment closing, any deficit identified by Raytheon and proposed as an adjustment under CAS 413 is therefore an unallowable cost.”). Mr. McGrath also noted another possible basis for denial:

Although a moot point because the government has no intention of sharing in this pension deficit adjustment, the Government sees nothing in CAS 413-60(c)(9) that allows the use of CAS-covered sales as a proxy for pension plan costs in determining the amount of the Government’s share.

Tr. 1373-74; PX 20.²² While Mr. McGrath saw fit to note even this “moot” issue, he did not make any statement in the denial letter about the waiver of claims section of the novation agreement. Tr. 1374; PX 20. Mr. McGrath instead testified that the DCMA and the DCAA were reviewing and auditing the AIS segment closing claim until the Joint Guidance was issued in July 2004. Tr. 1375. Mr. McGrath further testified that he stopped considering the AIS segment closing claim at the time he sent the September 30, 2004 letter, and not when he sent the March 7, 2005 final decision letter in response to Raytheon’s demand for a contracting officer’s final decision. Tr. 1375.

On examination by the government, Mr. McGrath testified that when he signed the novation agreement on behalf of the government, he did not have any contact or conversation with the signatories for Raytheon or L-3 and never discussed the meaning of any of the paragraphs of the novation agreement. Tr. 1382. Mr. McGrath further testified that the government could not reimburse Raytheon unless Raytheon had funded the pension plan in the amount requested. Tr. 1383. Finally, Mr. McGrath testified that

²² This issue relates to the government share calculation which is addressed later in this opinion.

he did not receive a “claim” from Raytheon with respect to the AIS pension deficit until January 24, 2005. Tr. 1385.

On redirect with Raytheon, Mr. McGrath clarified that he had received a “certified claim” from Raytheon for the AIS segment closing deficit on January 24, 2005. He then explained that when a contractor informally asserts that it is entitled to money that is also considered to be a “claim” in a more “common” sense. Tr. 1385-86. Mr. McGrath further testified that prior to January 2005 he had himself referred to Raytheon’s CAS 413 pension deficit proposal for AIS as a “claim” in the “common” sense including in an October 4, 2002 e-mail to Raytheon. Tr. 1386-87; PX 385.

b. Rodger Christiansen

Raytheon presented the testimony of Mr. Rodger Christiansen, a corporate contract specialist for the DCMA assigned to Raytheon’s corporate office with a specialty in corporate restructuring and mergers and acquisitions, who testified regarding his involvement with the preparation of the AIS novation agreement. Mr. Christiansen, who also served for a brief period as the Acting DCE, was the primary person involved in drafting the AIS novation agreement for the DCMA. Tr. 1252, 1255. Mr. Christiansen testified that his primary point of contact with Raytheon on the novation agreement was Mr. James Schepley, and that he also interacted with Mr. James “Vince” McKenzie, who prepared the initial draft of the novation agreement. Tr. 1267-68.

Mr. Christiansen testified to knowing about the L-3 acquisition of AIS from Raytheon and the need for a novation process as early as January 16, 2002. Tr. 1269-71; PX 415. Mr. Christiansen further testified that novation agreements only include

contracts for which final payment has not yet been paid, in contrast to closed contracts that are complete and for which final payment has already been made. Tr. 1274-77 (“I would be surprised if Raytheon would include a closed contract.”). At the time he was working on the AIS novation agreement, he was aware that Raytheon’s CAS 413 claims were being handled for the DCMA by Mr. Daniel Dowd, and both he and Mr. Dowd reported to the DCE on these issues. Tr. 1263-64.

On December 4, 2002, Mr. Christiansen attended a meeting of DCMA and DCAA personnel, including Mr. McGrath, Mr. Dowd, and Mr. Kingston, at the DCMA’s L-3 headquarters in New York to discuss outstanding items from the AIS sale, including the AIS novation agreement and the ongoing CAS 413 pension reviews. Tr. 1281-83; PX 388. Mr. Christiansen testified that he could not recall any discussion of Raytheon potentially waiving its CAS 413 claims through the novation agreement. Tr. 1282-85. Moreover, Mr. Christiansen identified the open-items list for the regular Open Items meeting held on December 13, 2002, on which the status of the AIS CAS 413 segment closing review was indicated as “In Process, Need Government Participation,” without any reference to the novation agreement. Tr. 1286; PX 389. Mr. Christiansen testified that it had never been suggested to him, prior to this litigation, that Raytheon had waived its CAS 413 claims by virtue of signing the AIS novation agreement. Tr. 1314.

The final version of the AIS novation agreement was approved by DCMA counsel on October 30, 2003. Tr. 1312; PX 404. Mr. Christiansen testified that the final version was in the form prescribed by the FAR, and agreed that in his experience deviation from the FAR form novation agreement did not occur. Tr. 1261. Mr. Christiansen testified

that during the drafting process he took the position, shared by DCMA counsel Mr. Kingston, that novation agreements must adhere to the FAR language. Tr. 1279-80; PX 416. Mr. Christiansen further testified to multiple exchanges he had with Mr. Kingston, with representatives from L-3, and with Mr. McKenzie, between December 2002 and October 2003, in which Raytheon and the government attempted to ensure that the novation agreement conformed to the “boilerplate FAR language.” Tr. 1287-1307. In the course of at least seventeen exchanges with Mr. Kingston, it was never suggested to Mr. Christiansen that Raytheon would waive its CAS 413 claim by signing the AIS novation agreement. Tr. 1312. Nor did Mr. McGrath suggest to Mr. Christiansen that Raytheon would waive its CAS 413 claim under the AIS novation agreement. Tr. 1313.

The AIS novation agreement was signed between November 11 and November 14, 2003 by Mr. John Harris for Raytheon, Mr. Steven Post for L-3, and Mr. John McGrath for the government. Tr. 1257, 1268; PX 347. Mr. Christiansen testified that the AIS novation agreement, as signed, “was in the form prescribed by FAR § 42.1204(i), 48 C.F.R. 42.1204(i) (2002).” Tr. 1260-61.

c. Daniel Dowd

Raytheon presented the testimony of Mr. Daniel Dowd, a corporate cost analyst for the DCMA assigned to Raytheon’s corporate office with chief responsibility for overseeing Raytheon’s compliance with the CAS. Mr. Dowd testified regarding his involvement with the preparation of the AIS CAS segment closing adjustment at the time

the AIS novation agreement was being drafted. Tr. 1162-63, 1214-17.²³ Mr. Dowd, who also served for a brief period as the Acting DCE, was involved in reviewing Raytheon's AIS CAS 413 segment closing adjustment for the DCMA, and reported to DCE John McGrath. Tr. 1165-66. In this capacity, Mr. Dowd interacted with Mr. Murphy, Mr. Cann, Mr. Garvey, and Ms. Tully from Raytheon, and during those interactions no one suggested that Raytheon had waived its CAS claims by signing the novation agreement. Tr. 1165-66. Mr. Dowd was aware of the AIS novation agreement, but he was only involved with reviewing the AIS CAS 413 segment closing adjustment. Tr. 1166-67, 1168-69; PX 347.

Mr. Dowd also testified to attending the December 4, 2002 meeting of DCMA and DCAA personnel at the DCMA's L-3 headquarters in New York. He stated that he did not recall any discussion at that meeting of Raytheon risking waiver of its AIS CAS 413 claim by signing the novation agreement. Tr. 1197-99. Mr. Dowd identified the open-items list for the regular Open Items meeting held on December 13, 2002, on which the AIS CAS 413 segment closing review was identified as "In Process, Need Government Participation," without any reference to the novation agreement. Tr. 1199-1201; PX 389. Mr. Dowd testified that he had never prepared an Open Items status report for the AIS segment that mentioned that Raytheon had waived its CAS 413 segment closing claim under a novation agreement. Tr. 1200. Mr. Dowd also testified that prior to 2011 he

²³ Mr. Dowd has worked for the DCMA's Raytheon Corporate Office since the early 1980s, with the exception of a three-year period in the mid-1980s when he worked as a contract buyer for the Air Force. Tr. 1214-17. In 1999, he became a corporate cost analyst. Tr. 1216. Mr. Dowd served as an acting DCE from late 2001 to early 2002 and became DCE/CACO ("Corporate Administrative Contracting Officer") in December 2006. Tr. 1162, 1215-16.

never heard anyone assert that Raytheon waived its CAS 413 claims pursuant to a novation agreement. Tr. 1213.

In explaining the DCMA's consideration of Raytheon's proposed AIS segment closing adjustment, Mr. Dowd testified that the DCMA had planned to contribute toward Raytheon's deficit segment adjustments by using the deficits to offset Raytheon's surplus segment adjustments. Tr. 1173. Mr. Dowd testified to receiving a copy of Raytheon's initial claim for an AIS segment closing adjustment in a July 12, 2002 letter from Mr. Garvey to Mr. McGrath, which included a calculated deficit by Raytheon's actuary, Mercer, in the amount of \$69,814,038. Mr. Dowd forwarded that letter to the DCAA and the DCMA's Contractor Insurance and Pension Review Center ("CIPR Center") for review of the calculations. Tr. 1192-94; PX 56; PX 85; PX 383. Mr. Dowd also testified that he received a copy of Raytheon's government share calculation for the AIS CAS 413 segment closing adjustment on February 25, 2003. Raytheon claimed that the government was responsible for 81.2 percent of the deficit, or \$56,688,999. Tr. 1201-02; PX 57.

In a letter dated August 11, 2003 from Mr. McGrath to Raytheon (a letter that Mr. Dowd believed he drafted on Mr. McGrath's behalf), the DCMA announced its initial finding of CAS noncompliance, finding Raytheon's AIS government share calculation was deficient because it was based upon sales data and not pension cost data. Tr. 1202-03; PX 337. In drafting the letter, Mr. Dowd consulted with DCMA counsel Mr. Kingston, and Mr. Kingston made no reference to denying Raytheon's CAS 413 claim on the basis of a novation agreement. Tr. 1203-04. As of October 14, 2003, the DCMA was

continuing to consider, and Raytheon was continuing to pursue, Raytheon's AIS CAS 413 claim, and the DCAA was working with Raytheon to gather additional data to calculate the government participation rate for AIS. Tr. 1204-05; PX 89. These efforts actively continued into November 13, 2003, Tr. 1205-06; PX 61, at approximately the same time the AIS novation agreement was being signed, Tr. 1206-07. Mr. Dowd also received a copy of a December 1, 2003 e-mail from Mr. McGrath to Mr. Murphy indicating that, on advice of counsel dated November 19, 2003, he would not be permitted to offset Raytheon's pension surpluses against Raytheon's pension deficits. Tr. 1207; PX 335. However, he also understood that Mr. McGrath's still intended as of December 1, 2003 to reimburse Raytheon for the CAS 413 segment closing deficits, including the AIS segment deficit. Tr. 1209; PX 335. Mr. Dowd agreed that Raytheon continued to pursue reimbursement for the government's share of the AIS segment closing claim after November 2003 when it signed the AIS novation agreement, and that the DCMA and the DCAA continued to consider that claim after November 2003. Tr. 1212.

On examination by the government, Mr. Dowd testified that he did not consult the AIS novation agreement when he was reviewing the CAS 413 segment closing adjustment calculations for AIS, and reiterated that he did not participate in negotiating or drafting the AIS novation agreement. Tr. 1234-35. Moreover, Mr. Dowd testified that he had never read the waiver language in the AIS novation agreement during that time. Tr. 1235. He further testified that he continued to work on the CAS 413 issues after November 2003 because he had not been informed by anyone that Raytheon had waived

its rights. Tr. 1235. Mr. Dowd testified that much of his effort during this time was dedicated to locating government share information. Tr. 1237. Mr. Dowd clarified that Raytheon's AIS segment closing calculation was noncompliant not only because it was based on sales rather than pension cost data, but also because it was based on an unrepresentative period. Tr. 1236-37; PX 337. Mr. Dowd further testified that the December 2002 meeting he attended at the DCMA's L-3 corporate headquarters occurred prior to Raytheon's filing of a certified claim. Tr. 1236. Mr. Dowd clarified that, to his knowledge, the first claim that DCMA received from Raytheon for the AIS segment closing adjustment was dated January 24, 2005. Tr. 1238; PX 19 (certified claim signed by Mr. Biggs Porter on behalf of Raytheon).

On reexamination by Raytheon, Mr. Dowd agreed that in the common sense of the word "claim," Raytheon had expressed to the government a belief that money was due to it well before 2005. Tr. 1239-40.

d. James Schepley

Raytheon also presented the testimony of Mr. James Schepley, Raytheon's Director of Policy for contracts at the time of the AIS segment closing in early 2002. He testified about his involvement in the preparation of the AIS novation agreement.

Mr. Schepley joined Raytheon following a twenty-four year career with the United States Air Force in which he reached the rank of full Colonel. Tr. 980. Approximately half of his Air Force career included responsibility for government contracting. Tr. 980. As Raytheon's Director of Policy for contracts for the corporation, Mr. Schepley's duties included overseeing all training activities for contracts and maintaining and modifying

corporate policies regarding contracts when there were changes to the FAR or any of the supplements thereto that would affect Raytheon. Mr. Schepley also was responsible for overseeing other “special opportunities” including, as is pertinent to this litigation, novation of the contracts associated with the AIS segment. Tr. 984-85. Mr. Schepley testified that a novation agreement serves to transfer contract responsibilities to a third party and requires agreement by all three parties involved—in this case L-3, Raytheon and the government. Tr. 986. Mr. Schepley testified that a novation agreement contains the terms of the agreement itself, taken from the FAR, and an attached list of all the contracts that will be transferred—in this case from Raytheon to L-3. Id. Mr. Schepley testified that, in his experience, the greatest amount of time spent on the agreements is spent on developing the list of contracts. Id. He further testified to understanding that the purpose of the AIS novation agreement was to transfer from Raytheon to L-3 the contracting responsibilities identified in the listed contracts. Id.

Mr. Shepley coordinated and oversaw the preparation of the AIS novation agreement by the Contracts Group at Raytheon. Tr. 985. Mr. Schepley, along with Mr. McKenzie, drafted a letter of notification of the sale of AIS to L-3 on April 18, 2002, wherein they included a preliminary list of contracts that Raytheon expected to transfer to L-3 along with an anticipated request for a novation agreement. Tr. 989-90; PX 381. Mr. Schepley and Mr. McKenzie also drafted a novation agreement using the standard FAR language and sent this draft agreement to Mr. Christiansen. Tr. 990. Thereafter, pursuant to the FAR, the government reviewed L-3’s management and financial capability to execute the contracts that were to be transferred under the novation

agreement. Tr. 990. Following this review, which took approximately one and a half years, Raytheon again became involved in the novation process in Fall 2003. Tr. 990-91. The AIS novation agreement was executed in November 2003. Tr. 992; PX 347. Prior to execution of the agreement, Mr. Schepley was involved in the review of early draft versions, the purpose of which was to ensure that the language in the agreement “was consistent with” FAR Part 42.12 and the supplement to Part 42.12 in the Defense FARs, which provide for the addition of certain language to the FAR language. Tr. 992; PX 366; PX 367. It was Mr. Schepley’s experience, both with Raytheon and with the Air Force, that sample contract language from the FAR was routinely used. Tr. 996. Mr. Schepley testified that, in his many years of government contracting experience, it was rare to negotiate deviations in language from the FAR, including the FAR form novation agreement, because the objective of the FAR is to standardize government contracts and because much of the FAR is governed by other federal law such that deviation may require different levels of approval. Tr. 996-97.

Mr. Schepley testified that he was unaware of any conversations concerning the scope of clause (b)(1) during the time the novation agreement was being drafted and that, prior to this litigation, no one suggested to him in any context that Raytheon waived its CAS 413 segment closing adjustment claims by virtue of the novation agreement. Tr. 999-1000.

On examination by the government, Mr. Schepley agreed that it was beneficial for both the government and the contractor to have uniformity and certainty in contracting through the various provisions of the FAR. Tr. 1001-02. Mr. Schepley also testified

about two drafts of the AIS novation agreement dated March 4, 2002 and April 29, 2002 that included language in clause (b)(1) identical to that in the FAR form novation agreement found at FAR subpart 42.12. Tr. 1005-06, 1015; DX 209; DX 210. In a draft dated May 31, 2002, additional language had been added to clause (b)(1). Tr. 1018-19; DX 213 (including language that read, "Such claims and rights are recognized to have been transferred to the transferee"). At that time, there was a break in discussions over the novation agreement while the government performed a review of L-3's capability to take on the contracts that were to be transferred. Tr. 1022-23. In October 2003, Mr. Schepley was again brought in by Mr. John Harris to help complete the drafting process for the AIS novation agreement. Tr. 1023-24; DX 215. Mr. Schepley then asked Mr. McKenzie to take a look at the agreement, and thereafter Mr. McKenzie took the lead on commenting on the agreement. Tr. 1026. Mr. Schepley further testified that he did not have any discussions about the effect of the waiver in clause (b)(1) of the novation agreement and that he made no personal effort to determine whether there were any contract claims that Raytheon wished to exclude from the waiver in clause (b)(1). Tr. 1026-27.

e. James "Vince" McKenzie

Raytheon also presented the testimony of Mr. James "Vince" McKenzie, a senior contracts administrator with Raytheon, who testified regarding his involvement with the preparation of the AIS novation agreement. Tr. 1036. Mr. McKenzie was involved in producing the list of contracts to be transferred (or novated) to L-3 and writing the initial draft of the novation agreement itself. Tr. 1038. Mr. McKenzie testified that within the

list of contracts there were both active contracts and completed contracts for which final payment had not yet occurred. Tr. 1039. Mr. McKenzie explained that more effort was expended in finalizing the list of contracts than in drafting the novation agreement, which he did by referring to FAR Part 42 at the direction of Mr. Schepley. Tr. 1038-39. Specifically, Mr. McKenzie used language from FAR 42.1204(i) to produce the initial draft of the AIS novation agreement. Tr. 1040-41 (“I had to fill in the blanks and so forth.”); PX 427. Mr. McKenzie testified that his only thought process in copying clause (b)(1) into the AIS novation agreement was “use the FAR.” Tr. 1042. In Fall 2003, when the parties were finalizing the AIS novation agreement, Mr. McKenzie was involved in reviewing the novation agreement and updating the final list of contracts to be novated by the agreement. Tr. 1044-45; PX 396; PX 397. After reviewing a draft of the novation agreement that existed in Fall 2003, Mr. McKenzie sent an e-mail to Mr. Schepley, Mr. Harris, and Mr. Christiansen that compared the draft to the FAR language. Tr. 1047-49.

Mr. McKenzie articulated his understanding of the purpose of the novation agreement as “at a date and time you snap a line and you take all ongoing contracts and any inactive contracts that had not yet been finally closed and you transfer those performance obligations, performance obligations related to those contracts, from -- from say Raytheon to the new entity, L-3; and of course, the corresponding payment obligation for . . . performance of those contracts would then go to L-3 as opposed to Raytheon.” Tr. 1042. With respect to his understanding of the effect of Raytheon’s waiver on its AIS CAS 413 segment closing claim, at the time he prepared the draft novation agreement,

and up until his participation in this litigation in 2011, Mr. McKenzie testified that he “didn’t know anything about CAS 413.” Tr. 1042-43. Mr. McKenzie further testified that he never had a conversation with anyone concerning Raytheon’s CAS 413 segment closing claims prior to 2011. Tr. 1050.

f. John Harris

Raytheon also presented the testimony of John Harris, Raytheon’s Vice President and Director of Contracts at the time the AIS novation agreement was signed, who testified to his involvement as the Raytheon signatory to the AIS novation agreement. Tr. 1083. Mr. Harris has held an array of contract management positions at every level within Raytheon over his 28 year career.²⁴ Tr. 1083-86. Mr. Harris testified to having had experience with a number of novation agreements prior to the AIS novation agreement. Tr. 1086-87. Mr. Harris testified that it was his understanding at the time he signed the AIS novation agreement that the purpose of the agreement was to “transfer a contract’s performance responsibility from Raytheon to L-3.” Tr. 1094; see also id. at 1087 (“Simply put, it’s basically a process by which the transferee, transferor and the

²⁴ Mr. Harris joined Raytheon in 1983 as a member of the Contracts Management Development Program. Tr. 1083. His positions at the company have included Contract Specialist, Contracts Administrator, Contracts Manager, Section Contracts Manager, Deputy Division Contracts Manager, Vice President of Contracts for Raytheon Technical Services, Staff Executive to the Chairman and CEO of Raytheon Company, Vice President of Contracts for Electronic Systems (one of Raytheon’s largest segments at the time), Vice President of Contracts for Government Defense Elements of Raytheon Company, and Vice President of Contracts for all of Raytheon. Tr. 1083-84. Mr. Harris has also been elected as an officer of the company and has held responsibility at different times “for operations, all manufacturing, supply chain, safety, security, all the different areas within the company.” Tr. 1084. In March of 2010, Mr. Harris became President of Raytheon Technical Services Company, an organization responsible for engineering, training, and logistics capabilities, with annual revenues in 2010 of \$3.5 billion with 10,000 employees working in 440 locations in 80 countries around the world. Tr. 1085-86.

government agree to move responsibility for contract performance from one party to the other.”). Mr. Harris testified that, in preparing a novation agreement, “the biggest deal is making sure that you list all of the contracts. That’s the really important or meaningful element of this entire process.” Tr. 1103. Mr. Harris also testified that in his experience, the FAR form novation agreement is “a very prescriptive document. It basically is a fill-in-the-blanks.” Tr. 1103. Mr. Harris further testified to believing that the waiver language in paragraph (b)(1) was limited to “contract performance-related claims.” Tr. 1090-91. Mr. Harris contrasted these claims with claims for pension costs, which survive any specific contracts. Tr. 1096. Mr. Harris testified that at the time he signed the AIS novation agreement he believed the waiver language of clause (b)(1) did not include CAS 413 claims “because those [would] be at the company level and not specifically related to contract performance.” Tr. 1092-93, 1095. Mr. Harris further testified that the issue of paragraph (b)(1) potentially waiving Raytheon’s segment closing adjustment claim for AIS had not come up in any communications he had with government representatives. Tr. 1097. Mr. Harris testified that he “absolutely [did] not” “believe that by signing the novation agreement Raytheon was releasing its rights against the government for settling up with pension the costs.” Tr. 1097.

g. Michael Garvey

Raytheon presented the testimony of Michael Garvey, Raytheon’s Director of Benefits Finance from 2000 through May 2003, who testified regarding his involvement in preparing Raytheon’s proposed AIS CAS 413 segment closing adjustment. Tr. 254. Mr. Garvey was responsible for working with Raytheon’s Actuary, Mercer, to produce

Raytheon's CAS 413 segment closing analyses, including the segment closing analysis for the AIS divestiture. Tr. 255-56.

Mr. Garvey testified that in all his time working on the AIS segment closing calculations, no one ever suggested to him that Raytheon's CAS 413 claim for the AIS segment was precluded by a novation agreement between Raytheon and the government. Tr. 293-94. Mr. Garvey further testified that, to his knowledge, the subject of novation agreements had never come up in any context related to the AIS segment closing and that he was never involved in any discussions related to the AIS novation agreement. Tr. 293-94, 330.

h. Deborah Tully

Raytheon presented the testimony of Deborah Tully, Raytheon's Director of Benefits Finance beginning in May 2003, when she replaced Michael Garvey. Tr. 427. Ms. Tully, prior to being hired by Raytheon, worked in a variety of consulting capacities, including as an actuarial consultant and team leader for actuarial analysts at Mercer.²⁵ Tr. 427-28. As the Director of Benefits Finance at Raytheon, she is responsible for overseeing the financial management of Raytheon's fringe benefits, including pensions. Tr. 427. Ms. Tully testified regarding her involvement in preparing Raytheon's proposed AIS CAS 413 segment closing adjustment.

²⁵ At Mercer, Ms. Tully's largest client was Raytheon. While consulting with Raytheon, Ms. Tully worked with Jonathan Barry and Jim Winer, the primary actuaries on the account. Tr. 429. Ms. Tully worked on the CAS 413 segment closing calculations for the Optical segment and the alleged PWF segment. Tr. 431.

Ms. Tully was responsible for helping to gather government participation data for the CAS 413 segment closing analysis for the AIS segment, a task that she worked on with Mr. Terrence Murphy. Tr. 443-445. Ms. Tully also consulted with the DCMA and the DCAA in preparing her segment closing calculations. Tr. 445.

Ms. Tully testified that in all her time working on the AIS segment closing calculations, no one ever suggested to her that Raytheon's CAS 413 claim for the AIS segment was precluded by a novation agreement. Tr. 452. Ms. Tully further testified that she had no understanding of novation agreements prior to this litigation. Tr. 457-58.

i. Terrence Murphy

The parties also presented the testimony of Mr. Terrence Murphy, Raytheon's Assistant Controller for Government Accounting from 2000 to 2005, who testified regarding his involvement in preparing Raytheon's proposed AIS CAS 413 segment closing adjustment.²⁶ As Assistant Controller for Government Accounting, Mr. Murphy was Raytheon's primary interface with the DCMA's Raytheon Corporate Office and was responsible for ensuring compliance with CAS and FAR requirements. Tr. 22. During his tenure at Raytheon, the company was undergoing a major restructuring, including the divestiture of the AIS segment. Id. In connection with this restructuring, Mr. Murphy

²⁶ Mr. Murphy joined Raytheon in February of 1966. After a year in the manufacturing operation he participated in Raytheon's Financial Management Development Program. Mr. Murphy thereafter held a number of positions in the company before moving to corporate headquarters in the 1980s as a cost proposal coordinator for the corporation. Tr. 20-21. Mr. Murphy became a division controller for a division of the corporation, Microwave and Power Tube Division, in the early 1990s. Tr. 21. In the late 1990s Mr. Murphy again became a corporate cost proposal coordinator. Id. In 2000, Mr. Murphy became the assistant controller for Government Accounting and worked in that capacity from until January of 2005, at which time he retired from Raytheon. Id.

was responsible for finalizing Raytheon's corporate restructuring packages with the government and for negotiating Raytheon's CAS 413 segment closing adjustments. Tr. 22, 29. Mr. Murphy collaborated with Mr. Michael Garvey, Raytheon's Director of Benefits Finance, on the government share calculations. Tr. 69-70. Mr. Murphy testified that in the entire period when he was negotiating the AIS CAS 413 segment closing proposals, no one ever suggested to him that the novation agreement for AIS precluded Raytheon's CAS claims. Tr. 62-63, 77, 96.

Mr. Murphy testified that when he was working on the AIS CAS 413 segment closing adjustment, he had no knowledge at all about the specific terms of the AIS novation agreement and was not involved in the creation of the novation agreement, though he was aware that a novation agreement was required when a business is sold to another business. Tr. 227-28. He also reemphasized that he never had any discussion with anyone from Raytheon or the government about the terms of the AIS novation agreement until this litigation. Tr. 229.

j. Robert Cann

The parties presented the testimony of Robert Cann, a Raytheon corporate manager of Government Accounting from November of 2001 to 2005 and director of Corporate Government Accounting following the retirement of Mr. Murphy. Tr. 369. In both capacities, Mr. Cann was responsible for interfacing with the DCAA and the DCMA regarding government accounting issues at the corporate level. Tr. 369. Mr. Cann was responsible, along with Mr. Murphy, for computing the government's share of the CAS 413 segment closing adjustment amount. Tr. 374. Along with Mr. Murphy, Mr. Cann

was also responsible for preparing and negotiating Raytheon's corporate restructuring package with the government for the divestiture of the AIS segment, including Raytheon's CAS 413 segment closing adjustment proposal. Tr. 369-70, 389. Mr. Cann testified to a general understanding that a novation agreement was normally needed when a business is sold. Tr. 389. He further testified that during the negotiations regarding the AIS segment closing adjustment, the issue of the AIS novation agreement never came up and that he never heard anyone say that the novation agreement precluded Raytheon's CAS claims. Tr. 389. Mr. Cann further testified that he had no understanding one way or the other as to whether Raytheon had waived and transferred its AIS segment closing claim in the AIS novation agreement. Tr. 416-17.

2. Findings of fact and conclusions of law

The consistent and overwhelming evidence adduced at trial establishes that not one of the government or Raytheon employees involved in the processing and signing of the AIS novation agreement or in the negotiations surrounding the AIS CAS 413 segment closing adjustment (several of whom were involved in both) understood that the waiver set forth in the AIS novation agreement, which was taken from FAR 42.1204(i),²⁷ barred Raytheon's CAS 413 segment closing claim. To the contrary, the evidence established

²⁷ The text of the waiver is set forth above, but is repeated here for convenience:

(b) In Consideration of These Facts, the Parties Agree that by this Agreement:

(1) The Transferor confirms the transfer to the Transferee, and waives any claim and rights against the Government that it now has or may have in the future in connection with the contracts.

AIS novation agreement; see also FAR 42.1204(i)(b)(1).

that the government and Raytheon employees involved in the negotiations of both the novation agreement and the CAS 413 segment closing adjustment believed up until issuance of the DCMA/DCAA Joint Guidance in July 2004 that Raytheon was entitled to payment of the government's share of any pension deficit identified in the segment closing calculations undertaken after the AIS sale to L-3.²⁸ The evidence established that both sides understood that Raytheon had not transferred its pension obligations associated with the closed AIS segment to L-3, and that L-3 would not be assuming Raytheon's preexisting pension obligations to AIS employees.²⁹ In addition, although a formal certified claim for the CAS 413 pension deficit was not filed until January 24, 2005, see PX 19, neither the government contracting officers nor Raytheon employees negotiating the CAS 413 segment closing adjustment believed that the waiver in the novation agreement barred Raytheon's claim after the novation agreement was signed by all parties.³⁰ The witnesses from both sides explained at trial that the waiver in the novation agreement was included to fulfill the regulatory obligation set out in the FAR and was edited to ensure consistency with the language in FAR 42.1204(i).³¹ Government witnesses from the DCMA responsible for overseeing Raytheon's contracts and cost

²⁸ Tr. 1362-69 (McGrath).

²⁹ DCE McGrath testified that he was aware during his tenure as DCE that Raytheon retained the pension plans as part of the divestiture of AIS. Tr. 1336; see also PX 41.0112 ("The Sellers shall retain all liability and responsibility for the defined benefit pension plans maintained by the Sellers in which Transferred Employees participate as of the Closing . . .").

³⁰ Tr. 1377, 1379 (McGrath); Tr. 1312-14 (Christansen); Tr. 1213 (Dowd); Tr. 999-1000 (Schepley); Tr. 293-94 (Garvey); Tr. 452 (Tully); Tr. 229 (Murphy); Tr. 389 (Cann).

³¹ Tr. 1279-80, 1307 (Christiansen); Tr. 990 (Schepley); Tr. 1042 (McKenzie); Tr. 1103 (Harris).

accounting compliance confirmed that they did not understand the novation agreement to have any bearing on the negotiations over Raytheon's CAS 413 AIS segment closing calculations.³²

In light of the consistent testimony of Raytheon and government employees, Raytheon once again seeks reconsideration of the court's earlier ruling that the novation agreement may bar the AIS CAS 413 segment closing claim. Raytheon argues that, consistent with all of the testimony, as a matter of law the novation agreement does not extend to Raytheon's segment closing claim. In the alternative, Raytheon argues that to the extent the novation agreement has some legal bearing on the segment closing claim, the evidence establishes that the novation agreement should be reformed to comport with the parties' contemporaneous and common understanding or vitiated to the extent the novation agreement bars the segment closing claim.

The government argues based on this same consistent testimony of government and Raytheon employees that reconsideration of the court's earlier ruling should not be granted. The government asserts that nothing in the testimony undercuts the government's legal contention that the novation waiver language set forth in FAR 42.1204(i) and incorporated into the AIS novation agreement bars Raytheon's AIS CAS 413 pension deficit-related claim. According to the government, the language in the agreement, which incorporated the FAR waiver provision, is intended to protect the government from further liability to Raytheon for contractual claims "in connection" with segment contracts and thus extends to Raytheon's CAS 413 claim that arises from the

³² Tr. 1213 (Dowd); Tr. 1312 (Christiansen); Tr. 1382 (McGrath).

contracts held by AIS. The government argues that the court must interpret the waiver provision in light of the FAR and its general purposes and that the opinions of government and Raytheon employees are not relevant to the meaning of the novation agreement waiver. See Honeywell, Inc. v. United States, 661 F.2d 182, 186 (Ct. Cl. 1981). If the regulatory language in FAR 42.1204(i) bars the CAS 413 claim, the government argues, it must be followed. See Honeywell, 661 F.2d at 186; Santa Fe Eng'rs, Inc. v. United States, 801 F.2d 379, 381 (Fed. Cir. 1986).

The government further contends that the undisputed evidence establishes that the novation agreement waiver was not vitiated by government actions taken after the waiver was signed, because Raytheon did not file a “formal” claim for payment of the CAS 413 segment closing adjustment until after the novation agreement was signed by the parties. The government argues that Raytheon’s submission of CAS 413 calculations to the government’s contracting officer and the contracting officer’s review of those calculations prior to and subsequent to the execution of the novation agreement was not enough to vitiate the waiver. In support of its legal argument, the government relies upon Sam Bonk Uniform & Civilian Cap Co. v. United States, 230 Ct. Cl. 926 (1982), in which the Court of Claims concluded that, where the entire course of action on the “claim” took place well after both the execution and effective date of the release, the “contracting officer’s failure to consider the release issue . . . can therefore shed no light on the intentions of the parties in executing the release.” The government contrasted the facts in Sam Bonk with those of Winn-Senter Constr. Co. v. United States, 110 Ct. Cl. 34 (1948), where the contractor’s claim had been submitted to the contracting officer prior to

execution of a release and was decided on the merits by the contracting officer subsequent to execution of the release such that “the claim straddled the release.” Sam Bonk, 230 Ct. Cl. at 926 (“[T]he conduct of both parties shows that they did not construe the release as an abandonment or forfeiture of this pending claim.”) (quoting Winn-Senter, 110 Ct. Cl. at 66).³³ The government argues that Raytheon’s failure to submit a certified claim before it signed the novation agreement bars its claim under Sam Bonk.

Given the overwhelmingly consistent testimony of the government and Raytheon witnesses discussed above, the court finds that it must reconsider its earlier reading of the novation agreement waiver in Raytheon II. For the reasons discussed below, the court concludes that the waiver set forth in the AIS novation agreement, which incorporates the language of the FAR, encompasses only contract-specific claims. The court concludes that the subject waiver did not extend to the AIS CAS 413 segment closing claim because the AIS segment closing claim is not a contract-specific claim but instead involves a claim to settle-up pension liabilities that are still retained by Raytheon and were not transferred as part of the segment sale.

The court turns first to the purpose of novation agreements and of the waiver provision in particular. There is no doubt that the novation agreement authorized in the FAR is intended to protect the government. Through a novation agreement, the government legally recognizes a successor-in-interest to a government contract (or a list of contracts) following a transfer of that contract that would otherwise be prohibited by

³³ Raytheon argues that it submitted its CAS 413 calculations well before the novation agreement was signed and that the government was therefore on notice of its “claim” for the pension deficit identified following the AIS segment closing.

the Anti-Assignment Act. Generally speaking, the Anti-Assignment Act, 41 U.S.C. § 15, prohibits the transfer of a government contract. See Delmarva Power & Light Co. v. United States, 542 F.3d 889, 892 (Fed. Cir. 2008); Westinghouse Elec. Co. v. United States, 56 Fed. Cl. 564, 569 (2003), aff'd, 97 Fed. App'x 931 (Fed. Cir. 2004) (“It is well-settled law that the anti-assignment legislation generally prohibit the transfer of government contracts and the assignment of claims against the government.”).³⁴ This statutory prohibition is intended to protect the government from “persons of influence [] buying up claims against the United States, which might then be improperly urged upon officers of the Government” and, relevant to this case, “to prevent possible multiple payment of claims, to make unnecessary the investigation of alleged assignments, and to enable the Government to deal only with the original claimant.” United States v. Shannon, 342 U.S. 288, 291 (1952) (quoting United States v. Aetna Sur. Co., 338 U.S. 366, 373 (1949)); Ins. Co. of the West v. United States, 100 Fed. Cl. 58, 66 (2011).

Through a novation agreement, the government is able to approve an assignment and protect itself from the possibility of multiple claims.³⁵

³⁴ The Anti-Assignment Act is comprised of 41 U.S.C. § 15 (pertaining to assignment of contracts) and 31 U.S.C. § 3727 (pertaining to assignment of claims). Under 41 U.S.C. § 15(a), “[n]o contract . . . or any interest therein, shall be transferred by the party to whom such contract . . . is given to any other party, and any such transfer shall cause the annulment of the contract or order transferred, so far as the United States is concerned.” Though in effect at the time the events in this action occurred, 41 U.S.C. § 15 was repealed, approved January 4, 2011; the prohibition on transfer of contract and certain allowable assignments is now found at 41 U.S.C. § 6305.

³⁵ Transfers or assignments occurring by operation of law are also exempt from the statutes’ application. Shannon, 342 U.S. at 292 (“the statute does not apply to assignments by operation of law, as distinguished from voluntary assignments”); Tuftco Corp. v. United States, 614 F.2d 740, 745 (1980) (“the courts have held selected assignments to be by operation of law and

The policies and procedures for implementing novation agreements that are codified at FAR 42.1204, allow the government, when it determines that it is in its interest, to enter into novation agreements for the recognition of a third party as a successor-in-interest to a government contract. Id.

Federal contracting regulations have historically contemplated that a novation agreement shall ordinarily provide in part that:

- (1) The transferee assumes all the transferor's obligations under the contract;
- (2) The transferor waives all rights under the contract as against the Government;
- (3) The transferor guarantees performance of the contract by the transferee . . . ; and
- (4) Nothing in the agreement shall relieve the transferor or the transferee from compliance with any Federal law.

See 21 Fed. Reg. 5352, 5359 (July 18, 1956), 38 Fed. Reg. 32,808, 32,809 (Nov. 28, 1973), 48 Fed. Reg. 42,101, 42,381-83 (Sept. 19, 1983).³⁶ Effectuating this intent, the FAR form novation agreement, which now appears in FAR 42.1204(i), is designed for use when “all the transferor’s assets are transferred,” and states in relevant part, “the Transferor confirms the transfer to the Transferee, and waives any claims and rights against the Government that it now has or may have in the future in connection with the contracts.” FAR 42.1204(i)(b)(1).

exempt from the statutes’ prohibition”); L-3 Commc’ns Integrated Sys., L.P. v. United States, 84 Fed. Cl. 768, 776 n.13 (2008); Westinghouse Elec. Co., 56 Fed. Cl. at 569; Johnson Controls World Servs., Inc. v. United States, 44 Fed. Cl. 334, 343 (1999).

³⁶ The form novation agreement was added to the defense contracting regulations on July 18, 1956, 21 Fed. Reg. 5359 (codified at 32 C.F.R. § 16.505), and the civilian contracting regulations on November 28, 1973, 38 Fed. Reg. 32,808-10 (codified at 41 C.F.R. § 1-26.402). When the FAR system was created in 1984, this provision was recodified in FAR Subpart 42.12. See 48 Fed. Reg. 42,381-83.

Because the subject novation agreement is taken directly from FAR 42.1204, the court agrees with the government that it must construe the provision to effectuate the intent of the promulgators and not the parties. See Honeywell, 661 F.2d at 186. Unlike interpreting a contract clause, which is construed in order to give it the effect intended by both parties, when interpreting regulatory language a court's duty "is to effectuate the intent of the promulgators of the regulation." Id. The fact that the regulatory language is contained in a contract does not change its interpretation. Id.; see also Santa Fe Eng'rs, 801 F.2d at 381.

Here, the court concludes that when it construes the above-quoted language in light of its purposes the waiver set forth in the novation agreement it must reject the government's reading. The waiver is intended to protect the government from multiple claims that might arise "in connection with" the specific contracts that are transferred from the seller to the buyer and identified in the attached lists.³⁷ The provision is focused on what is being transferred and fixes the relationship among the players—the government, the seller, and the buyer—with regard to the obligations that are transferred. In other words, it protects the government from facing the prospect of having to deal with multiple claims arising from the transferred contracts.

In this connection, it is significant that Raytheon's pension obligations with regard to its former AIS employees were not transferred to L-3. Rather, under the asset sale purchase agreement to L-3, Raytheon retained its pension liabilities for its AIS

³⁷ Indeed, the testimony established that most of the time spent on the novation agreement was spent on identifying contracts. Tr. 1103 (Harris); Tr. 986 (Schepley); Tr. 1038-39 (McKenzie).

employees. PX 41.0112 (“The Sellers shall retain all liability and responsibility for the defined benefit pension plans maintained by the Sellers in which Transferred Employees participate as of the Closing . . .”). Because the pension obligation to the AIS employees was not transferred and the right of AIS employees to a pension is not specific to any of the novated contracts, nor any other specific contracts, the novation waiver was not triggered with respect to Raytheon’s continuing pension obligations. Moreover, because Raytheon retained the pension liabilities, the government does not face the possibility of any conflicting pension-related claims for AIS employees from both Raytheon and L-3.

The importance of Raytheon retaining liability for the AIS pension is confirmed by the fact that under the CAS, if Raytheon had transferred all the pension funds and obligations associated with the AIS segment employees to L-3 as part of the sale, the sale would not have triggered a segment closing adjustment under CAS 413.³⁸ If there are any future periods within which to adjust any pension surplus or deficit through the transferred contracts, then the segment lives on and there is no segment closing for purposes of settling-up pension liabilities. On the other hand, the CAS provides that a segment closing adjustment is required when the seller sells the segment along with the segment’s government contracts but retains the pension obligation. It is in that circumstance, where there are no future contracts through which pension contributions

³⁸ See CAS 413-50(c)(12)(v) (“If a segment is closed due to a sale or other transfer of ownership to a successor in interest in the contracts of the segment and all of the pension plan assets and actuarial accrued liabilities pertaining to the closed segment are transferred to the successor segment, then no adjustment amount pursuant to this paragraph (c)(12) is required.”).

can be adjusted, that a segment closing adjustment is required.³⁹ Thus, Raytheon was required to determine through its calculations a segment closing adjustment pursuant to CAS 413-50(c)(12) because Raytheon retained and did not “transfer” to L-3 all the pension obligations owed to its former AIS employees when it transferred certain contracts.⁴⁰ Because Raytheon retains the liability for paying pensions to eligible AIS employees, Raytheon is required to resolve the pension deficit or surplus claim under other open government contracts Raytheon has with the government.⁴¹ The claim is not resolved through the contracts transferred from Raytheon to L-3. Moreover, because Raytheon retained the pension liability separate from any individual contract, the government does not face the possibility of conflicting liability with regard to the

³⁹ See Gates, 584 F.3d at 1067 (“The requirement that contract prices be ‘adjusted accordingly’ indicates that, as the CAS Board’s promulgation comments state, ‘[u]nder this final rule, the [CAS 413-50(c)(12)] adjustment is determined as a current period adjustment.’” (quoting 60 Fed. Reg. 16,534, 16,539 (Mar. 30, 1995))); see also Allegheny Teledyne, 316 F.3d at 1382-83 (holding that the prior version of CAS 413 requires a current period adjustment); Teledyne, 50 Fed. Cl. at 170-71 (“The CAS 413 segment closing adjustment was triggered because Teledyne retained responsibility for the pensions, but not the contracts over which the gains and losses attributable to the government’s share of pension costs would ordinarily be amortized”); Gen. Elec. Co. v. United States, 84 Fed. Cl. 129, 133 (2008).

⁴⁰ See DIRECTV Grp., 670 F.3d at 1376 (in contrast to the original CAS 413, “[r]evised CAS 413 requires that the adjustment be ‘based on the pension plan assets and actuarial accrued liabilities remaining with the contractor,’ [CAS 413-50(c)(12)(v) (1996) (emphasis added)]”); CAS 413-50(c)(12)(v) (“If only some of the pension plan assets and actuarial accrued liabilities of the closed segment are transferred, then the adjustment amount required under this paragraph (c)(12) shall be determined based on the pension plan assets and actuarial accrued liabilities remaining with the contractor.”).

⁴¹ See CAS 413-50(c)(12)(vi) (“The adjustment may be recognized by modifying a single contract, several but not all contracts, or all contracts, or by use of any other suitable technique.”); CAS 413-50(c)(12)(vii) (“The full amount of the Government’s share of an adjustment is allocable, without limit, as a credit or charge during the cost accounting period in which the event occurred and contract prices/costs will be adjusted accordingly. However, if the contractor continues to perform Government contracts, the contracting parties may negotiate an amortization schedule, including interest adjustments.”).

contracts transferred to L-3 and therefore the government does not need the AIS novation agreement to protect itself from possible conflicting CAS claims. Raytheon's CAS 413 segment closing claim is thus not "in connection with" contracts, under the terms of FAR 42.1204(i)(b)(1).

Finally, the court agrees with Raytheon that the court's reading of the novation agreement is further confirmed by the Federal Circuit's recent decision in Gates, which recognizes that a segment closing adjustment is never contract-specific. Gates, 584 F.3d at 1069 n.8 ("CAS 413 is unusual in that it does not require an analysis of individual contracts, but rather . . . affects all of the contractor's CAS-covered contracts."). The Federal Circuit has explained:

The current period adjustment provided for under CAS 413, by its terms, represents an adjustment of previously-determined pension costs for the segment as a whole, and does not require an impact analysis of individual contracts within the segment. This adjustment is not contract specific, nor does it involve a cost adjustment of any individual contract.

Gates, 584 F.3d at 1069; see also Allegheny Teledyne, 316 F.3d at 1373 (affirming the Court of Federal Claims' holdings concerning a prior version of CAS 413 that "the amount of the adjustment that is recoverable depends on the . . . contracts under which the costs were paid" and that "the adjustment is effectuated in the current period, meaning it may be recovered under any flexibly-priced contract that remains open during the year of the segment closing"). Thus, the segment closing adjustment requires a calculation to be made without regard to individual contracts. Gates, 584 F.3d at 1068. As the Circuit stated:

[W]hile CAS 413 looks to past contracts in measuring the amount of the required segment closing adjustment, the adjustment itself is implemented through contracts open during the period in which the segment is closed. . . . This is so because CAS 413-50(c)(12)(vi) provides that the segment-closing adjustment “may be recognized by modifying a single contract, several but not all contracts, or all contracts, or by use of any other suitable technique.”

Gates, 584 F.3d at 1068 (internal citation omitted). As such, the CAS 413 segment closing adjustment operates outside of a contract-specific novation agreement.

It is for all of these reasons that Raytheon’s claim for payment of the AIS pension deficit based on its CAS 413 segment closing calculations is not barred by the waiver provided for in the AIS novation agreement. Accordingly, the court will consider Raytheon’s AIS pension deficit claim.⁴²

B. The Optical novation agreement

1. Testimony and evidence presented on the formation of the Optical novation agreement

Raytheon acquired the Optical segment through its merger with Hughes Aircraft Company in December 1997 and sold it to B.F. Goodrich Company (“B.F. Goodrich”) on March 1, 2001. By the terms of the asset purchase agreement between Raytheon and B.F. Goodrich, Raytheon retained the pension plan assets and actuarial accrued liabilities for Optical. See PX 230.0048 (“The Seller will retain all liability and responsibility for the defined benefit pension plans maintained by Seller in which Transferred Employees participate as of the Closing Date”). In connection with Raytheon’s sale of Optical,

⁴² Having determined that the novation agreement does not bar the claim, the court does not have to reach the issue of whether the waiver was vitiated by the government’s actions after the novation agreement was signed.

the government and Raytheon entered into a novation agreement with B.F. Goodrich on or about March 7, 2001 with an effective date of December 27, 2000. PX 369; DX 20 (“Optical novation agreement”).

The Optical novation agreement was also modeled on the FAR 42.1204(i) form novation agreement. The standard text of clause (b)(1) included in the agreement reads as follows:

(b) In Consideration of These Facts, the Parties Agree that by this Agreement:

(1) The Transferor confirms the transfer to the Transferee, and waives any claims and rights against the Government that it now has or may have in the future in connection with the contracts.

Optical novation agreement; see also FAR 42.1204(i)(b)(1).

As noted above, the government contends that the above-quoted waiver in the novation agreement bars Raytheon’s CAS claim for \$8,693,533.76 from the sale of the Optical segment to B.F. Goodrich. Raytheon contends, as it did with regard to the AIS novation agreement, that the subject waiver in the Optical novation agreement does not extend to CAS claims, or if it does, the parties’ actions both before and after entering into the novation agreement demonstrate that the contract language should be reformed to exclude CAS claims or vitiated with regard to the CAS 413 claim.

At trial, the parties presented testimony⁴³ and evidence on the formation of the Optical novation agreement and the continued review and negotiation of Raytheon’s CAS 413 claim related to the sale of the Optical segment following the execution of the

⁴³ As with the AIS segment, pursuant to pre-trial stipulations, the witnesses called by both parties testified first for Raytheon and then for the government.

Optical novation agreement. Testimony was heard from John McGrath, Rodger Christiansen, Daniel Dowd, Scott Faith (Raytheon's signatory to the Optical novation agreement), Michael Garvey, Deborah Tully, Terence Murphy, and Robert Cann.

a. John McGrath

DCE McGrath testified regarding his involvement with the review of Raytheon's CAS 413 segment closing claim arising from the sale of the Optical segment following execution of the Optical novation agreement.⁴⁴ Prior to the execution of the Optical novation agreement in March 2001, Mr. McGrath testified to being aware that there was going to be a novation agreement, which was ultimately signed by Mr. John Holley on behalf of the United States. Tr. 1327. Mr. McGrath testified that his predecessor found Raytheon in CAS noncompliance based on Raytheon's failure to submit a CAS segment closing calculation for the Optical segment. The finding was issued on April 30, 2001, approximately six weeks after the execution of the Optical novation agreement. Tr. 1329-31; PX 343. Mr. McGrath further testified that his DCE predecessor received a letter dated October 9, 2001, approximately seven months after the execution of the Optical novation agreement, in which Mercer identified on behalf of Raytheon a \$9,558,952 pension deficit for the Optical segment. Tr. 1331-32.

⁴⁴ As mentioned previously, Mr. McGrath testified that he worked for the DCMA from 1984 to 2006, and was assigned to Raytheon throughout his time with the DCMA. Tr. 1316. During his twenty-two year career with the DCMA, Mr. McGrath served as a supervisory cost and price analyst, a systems contracting officer, a DACO, a principal administrative contracting officer, and a DCE. Tr. 1316-18. Mr. McGrath also holds a master's degree in Public Administration and received training during his time at the DCMA on the CAS, including CAS 413. Tr. 1318.

Beginning in April 2002, Mr. McGrath became the DCMA's Raytheon Corporate Office DCE. Tr. 1317.⁴⁵ In that capacity, Mr. McGrath attended a December 4, 2002 meeting at the DCMA's L-3 headquarters in New York at which individuals from the DCAA and the DCMA discussed the Optical segment closing in addition to the AIS segment closing. Tr. 1339-40. Following the New York meeting and approximately nine months after the Optical novation agreement was signed, Mr. McGrath sent an e-mail to Raytheon on December 9, 2002, stating that he was still considering government participation in Raytheon's deficit segment closings, including a plan to settle all CAS 413 segment closings to the maximum extent by offsetting deficit and surplus segment closings. Tr. 1341-42; PX 331. On December 12, 2002, Mr. Garvey from Raytheon replied to Mr. McGrath proposing to offset the pension deficit from the Optical deficit against the pension surpluses from other segment closings. Tr. 1343-44; PX 332. At a December 13, 2002 Open Items meeting, the Optical segment closing was on the agenda noting an \$8 million adjustment due to Raytheon. PX 389; Tr. 1345-46. Waiver of the Optical segment closing claim by virtue of a novation agreement was not discussed. Id.

Mr. McGrath further testified that from January 2003 until September 30, 2004, the DCMA and the DCAA put a significant amount of time and effort into researching Raytheon's deficit calculations for its CAS 413 Optical segment closing claim. Mr. McGrath testified that he would not have requested this expenditure of resources if he had known he was going to deny Raytheon's request for government participation in the

⁴⁵ Mr. McGrath's role as DCE is described in detail in connection with his testimony regarding the AIS segment closing. See supra Part II.A.1.a.

Optical segment closing adjustment. Tr. 1348. On February 10, 2003, Mr. McGrath sent Raytheon another e-mail restating his plan to settle all the CAS 413 segment closings individually while determining the final amount owed collectively as an offset and noting that his superiors at the DCMA had agreed. Tr. 1348-49; PX 333. Mr. McGrath had also consulted with DCMA counsel, Mr. Kingston, on this proposal. Tr. 1349. At a June 30, 2003 Open Items meeting, the Optical segment closing was again on the agenda. PX 393; Tr. 1353. Once again, waiver of Optical segment closing claims under a novation agreement was not discussed. Id. At that time, Mr. McGrath recalled that “we had an agreement on Optical, but Raytheon wanted to wait for the Teledyne joint guidance” and that he “[a]bsolutely [had] not” “denied the Optical claim by that point.” Tr. 1353-54.

On December 1, 2003, Mr. McGrath sent another e-mail to Mr. Murphy indicating that he believed that CAS 413 surpluses and deficits should be offset against one another, but this view was not shared by DCMA counsel and thus he would not be able to carry out the offset plan. Tr. 1362-64; PX 335. Mr. McGrath testified that this e-mail represented a change in the DCMA’s position. Tr. 1364. Despite the change in position on offsets, Mr. McGrath testified that he still intended to cover the government’s share of Raytheon’s Optical pension deficit. Tr. 1365. The Optical segment closing was again on the agenda at the December 11, 2003 and February 12, 2004 Open Items meetings without any discussion of the waiver in Optical’s novation agreement. Tr. 1365-68; PX 408; PX 410. Indeed, Mr. McGrath reiterated in his testimony that he “had made an offer to Mr. Murphy to settle the Optical, so I don’t think it was still being evaluated . . . I ha[d]n’t closed it.” Tr. 1367. And again, at the June 10, 2004 Open Items meeting, the

Optical segment closing was on the agenda, and Mr. McGrath was still considering Raytheon's request for government participation in the Optical segment's pension deficit. Tr. 1368; PX 412.

As noted above, in July 2004, the DCMA and the DCAA issued the DCMA/DCAA Joint Guidance. Tr. 1368-69; DX 114. Consistent with this guidance, Mr. McGrath denied Raytheon's request for government participation in the Optical CAS 413 segment closing pension deficit on September 30, 2004. Tr. 1368-69. The reason cited by Mr. McGrath for disallowing the pension costs was Raytheon's failure to fund the Optical pension costs by the federal tax deadline for the year of the segment closing. Tr. 1370; PX 298. Mr. McGrath did not cite the novation agreement as a reason for the disallowance. Tr. 1370. Following the September 30, 2004 letter, Raytheon submitted an updated segment closing calculation and a demand for a contracting officer's final decision. PX 25. Mr. McGrath denied Raytheon's CAS 413 segment closing claim for Optical on February 1, 2005. Tr. 1372; PX 26. The stated reason for denying the claim was Raytheon's failure to fund the pension costs in the current tax year. Tr. 1372; PX 26 ("Because Raytheon did not fund what it proposes as the Government's share of the Optical Systems' deficit amount in the year of the segment closing, any deficit amount identified by Raytheon and proposed as an adjustment under CAS 413 is therefore an unallowable cost.").

b. Daniel Dowd

Mr. Daniel Dowd also testified regarding his involvement with the preparation of the Optical CAS segment closing adjustment following execution of the Optical novation

agreement.⁴⁶ Mr. Dowd, as an analyst with the DCMA, was involved in reviewing Raytheon's Optical CAS 413 segment closing calculation and reported to DCE John McGrath. Tr. 1165-66; 1169-70. In this capacity, Mr. Dowd interacted with Mr. Murphy, Mr. Cann, Mr. Garvey, and Ms. Tully from Raytheon, and during those interactions, the subject of Raytheon having waived its CAS claims by virtue of any novation agreements never came up. Tr. 1165-66. Though aware of the Optical novation agreement executed March 7, 2001, Mr. Dowd was not involved with its preparation. Tr. 1166-67. He also did not have the Optical novation agreement with him when he oversaw the CAS 413 segment closing for Optical. Tr. 1219-20.

Mr. Dowd testified that as of April 30, 2001, six weeks after the signing of the Optical novation agreement, the government cited Raytheon for failing to complete a CAS 413 segment closing adjustment for the sale of Optical to B.F. Goodrich. Tr. 1174; PX 343. At this time, the government was "still waiting to get any kind of calculation or claim or anything from Raytheon on that issue." Tr. 1221.

Mr. Dowd testified that Raytheon's initial CAS 413 segment closing calculation for the Optical segment, dated October 9, 2001 (approximately seven months after the Optical novation agreement was signed) asserted a \$9,558,952 deficit associated with the Optical pension plan. Tr. 1176-77; PX 78. On October 18, 2001, Mr. Dowd sent a

⁴⁶ As mentioned previously, Mr. Dowd was a corporate cost analyst for the DCMA assigned to Raytheon's corporate office at the time of the events in this case with chief responsibility for overseeing Raytheon's compliance with the CAS. Tr. 1162-63, 1214-17. Mr. Dowd has worked for the DCMA's Raytheon Corporate Office since the early 1980s, with the exception of a three-year period in the mid-1980s when he worked as a contract buyer for the Air Force. *Id.* In 1999, he became a corporate cost analyst. Tr. 1216. Mr. Dowd served as an acting DCE from late 2001 to early 2002 and became DCE/CACO ("Corporate Administrative Contracting Officer") in December 2006. Tr. 1162, 1215-16.

memo to the DCAA, requesting that the DCAA review Raytheon's CAS 413 submission for Optical. Tr. 1178-79; PX 371. The DCAA was "principally responsible for addressing the government participation." Tr. 1222. Also on October 18, 2001, Mr. Dowd sent a memo to the DCMA CIPR Center requesting that the CIPR Center review the segment closing adjustment calculation. Tr. 1179; PX 372. Mr. Dowd testified that the CIPR Center "would have reviewed the adjustment amount, the assets minus the liabilities. . . . Hopefully if we got the CIPR [report] in time, DCAA would incorporate the CIPR report into their final audit report and provide a bottom line number." Tr. 1221-22. Mr. Dowd testified that he would not have sent these two letters requesting review of these calculations if he had believed that Raytheon had already waived its Optical claim. Tr. 1179. Mr. Dowd testified to receiving a February 11, 2002 e-mail from DCMA counsel Mr. Kingston, stating that no one in the government had taken the position that the government would not participate in deficit segment closing adjustments. Tr. 1171-72; PX 376.

Mr. Dowd testified that as of June 18, 2002, the DCMA CIPR Center was still reviewing Raytheon's segment closing calculations for the Optical segment. Tr. 1181-82; PX 84. Mr. Dowd testified that as of August 14, 2002, the DCAA was still auditing Raytheon's segment closing calculations for the Optical segment. Tr. 1181. Mr. Dowd testified to receiving an August 14, 2002 audit report from the DCAA about the Optical segment, which incorporated the June 18, 2002 CIPR Center Report. Tr. 1179-81; PX 84. The audit report stated that the DCAA had accepted Mercer's deficit calculation submitted on behalf of Raytheon on March 7, 2002 and had also accepted Raytheon's

proposed government participation percentage, determining that the government's share of the Optical deficit would be \$8,182,463. Id.

Mr. Dowd testified that it was his understanding that the DCMA was planning to use deficits to offset surplus segments. Tr. 1173. Mr. Dowd also testified to being copied on a December 9, 2002, e-mail from Mr. McGrath to Raytheon in which Mr. McGrath described an agreement between Raytheon and the government to settle all the CAS 413 segment closings together and offset surpluses and deficits against each other. Tr. 1182; PX 331. Mr. Dowd identified the open-items list for the regular Open Items meeting held on December 13, 2002; on the list, the Optical CAS 413 segment closing review was characterized as "DCAA completed field work. DCAA had an exit with Raytheon on preliminary audit results. \$8 million in adjustment due to Raytheon," with no reference to a novation agreement. Tr. 1199-1201; PX 389. Mr. Dowd testified that he never prepared an Open Items status report for the Optical segment that mentioned that Raytheon had waived its CAS 413 segment closing claim by virtue of a novation agreement. Tr. 1200. Mr. Dowd also testified that prior to 2011 he never heard anyone assert that Raytheon waived its CAS 413 claims pursuant to a novation agreement. Tr. 1213.

Mr. Dowd further testified that he was the likely author of an April 22, 2003 letter from Mr. McGrath to Mr. Murphy at Raytheon, with a copy to Mr. Dowd, which stated that the DCMA agreed that the deficit adjustment amount for the Optical segment closing proposal was \$8,182,463. Tr. 1192; PX 269.

Mr. Dowd also received a copy of a December 1, 2003 e-mail from Mr. McGrath to Mr. Murphy indicating that on advice of counsel dated November 19, 2003, the government would not be permitted to offset Raytheon's segment closing surpluses and deficits. Tr. 1207; PX 335. However, the e-mail indicated that Mr. McGrath still intended to reimburse Raytheon for its CAS 413 Optical segment closing deficit. Tr. 1209; PX 335 ("for all situations where the Government has liability to Raytheon, it is still my intention to adjust final rates to reimburse Raytheon for these amounts"). Once the DCMA/DCAA Joint Guidance on the Teledyne decision came out in July 2004, the government took the position that it would not participate in any deficit segment closings where the pension costs had not been funded by the federal tax deadline for the year of the segment closing. Tr. 1210. The DCMA denied Raytheon's Optical claim for a segment closing adjustment on September 30, 2004, based on the current tax year funding requirement in the Joint Guidance. Tr. 1210-11; PX 298. After receiving the denial letter, Raytheon submitted a demand for a final decision for the Optical segment, which was denied by Mr. McGrath on February 1, 2005. Tr. 1211, 1231; DX 126; PX 26. Mr. Dowd testified that he understood that in the common sense of the word "claim," Raytheon believed that money was due to it and expressed that belief to the government well before 2005. Tr. 1239. Mr. Dowd agreed that Raytheon continued to pursue reimbursement for the government's share of the Optical segment closing deficit after the Optical novation agreement was signed in March 2001, and that the DCMA and the DCAA continued to consider that claim after March 2001. Tr. 1212.

c. Rodger Christiansen

Raytheon presented the testimony of Mr. Rodger Christiansen regarding the Optical novation agreement and CAS 413 segment closing.⁴⁷ Mr. Christiansen testified to having limited involvement in or awareness of the Optical novation agreement prior to its execution on March 7, 2001. Tr. 1254-55. His involvement consisted primarily of sending a copy of a prior novation agreement that he had worked on to the individual in charge of preparing the Optical novation agreement. Id. Mr. Christiansen testified that the Optical novation agreement was in the form prescribed by FAR 42.1204(i). Tr. 1260-61. Mr. Christiansen testified that in his experience there was no deviation from the FAR form novation agreement. Tr. 1261. Mr. Christiansen further testified that it was his understanding that novation agreements include contracts for which final payment has not yet been paid. Tr. 1274.

In addition to providing a template for the Optical novation agreement, while acting as DCE, Mr. Christiansen received a letter from Raytheon in connection with the Optical CAS 413 segment closing on October 9, 2001, which constituted Raytheon's initial CAS 413 submission for the Optical segment. Tr. 1264-65; PX 78. Enclosed with Raytheon's letter was a calculation prepared by Mercer on behalf of Raytheon identifying a \$9,558,952 deficit in the Optical pension funds. Id. Mr. Christiansen passed this letter on to Mr. Dowd, who was handling Raytheon's CAS 413 claims for the DCMA. Tr.

⁴⁷ As mentioned previously, Mr. Christiansen is a corporate contract specialist for the DCMA assigned to Raytheon's corporate office with a specialty in corporate restructuring and mergers and acquisitions. Mr. Christiansen has worked for the DCMA assigned to Raytheon since 1985, and with the exception of a 60-day period as an acting DCE he has been a corporate contract specialist since 1996. Tr. 1252.

1266. Mr. Christiansen was also copied on another letter from Raytheon on March 7, 2002, in which Raytheon identified a government share percentage of 85.6 percent associated with the Optical segment. Tr. 1266-67; PX 83.

On December 4, 2002, Mr. Christiansen also attended the meeting of DCMA and DCAA personnel at the DCMA's L-3 headquarters in New York to discuss outstanding items including the Optical and AIS segment closings. Tr. 1281-82; PX 388. Mr. Christiansen testified that he could not recall there being any discussion of Raytheon having waived its CAS 413 claims through the Optical or AIS novation agreements. Tr. 1282-85. Mr. Christiansen testified that it had never been suggested to him prior to this litigation that Raytheon had waived its CAS 413 claims by signing the Optical novation agreement. Tr. 1314.

d. Scott Faith

The parties presented the testimony of Mr. Scott Faith, Raytheon's Director of Contracts for the Surveillance and Reconnaissance Business at the time the Optical novation agreement was signed, who testified to his involvement as the Raytheon signatory to the Optical novation agreement. Tr. 1133. Mr. Faith has worked for Raytheon and Hughes Aircraft Company (prior to its acquisition by Raytheon) for twenty-eight years. Tr. 1130.⁴⁸

⁴⁸ Mr. Faith worked in the Finance and Accounting Department with Hughes Aircraft from 1982 through 1986 and in the Contracts Department for the two firms from 1986 through 2007. Tr. 1131-32. Mr. Faith transitioned into a management role in 1998 as Director of Contracts for the Surveillance and Reconnaissance Business. Tr. 1132-33. He assumed the role of Vice President of Contracts for the Space and Airborne Systems Business from 2002 through 2007, before

As Director of Contracts for the Surveillance and Reconnaissance Business, Mr. Faith was responsible for the oversight, management, administration, negotiation and closure of all contracts related to that business. Tr. 1133. The Optical Systems business reported to the Surveillance and Reconnaissance Systems business. Tr. 1134. With respect to the Optical novation agreement, Mr. Faith was responsible for obtaining the list of contracts that were to be novated to B.F. Goodrich, and he ultimately signed the novation agreement on behalf of Raytheon. Tr. 1133-34. Prior to signing the novation agreement, Mr. Faith reviewed a list of contracts prepared by the Optical contracts lead employee against the list that he had in his database to ensure that he had a complete list of contracts. Tr. 1133-34. This list included both active contracts (those for which performance remains ongoing) and inactive contracts (those for which performance is ended but final payment has not been received), but not closed contracts (those for which performance is ended and final payment had been received). Tr. 1137, 1141. Mr. Faith testified that the list of contracts that went along with the novation agreement involved more time and effort to put together than the novation agreement itself. Tr. 1135. With regard to the novation agreement itself, Mr. Faith testified that he was not involved in its drafting, that he was unaware whether it had been prepared by Raytheon or the government, and that he did not comment on or have any communications regarding the language of the agreement before signing it. Tr. 1142-43. Mr. Faith testified to reading the novation agreement before signing it and to understanding that its function was to

assuming his current role as Raytheon's Vice President of Program Management for the Space Systems Business. Tr. 1132.

transfer responsibility for performance of the contracts from Raytheon to B.F. Goodrich. Tr. 1143. Mr. Faith further testified to having no understanding of CAS 413 at the time he signed the novation agreement. Tr. 1144. Mr. Faith explained that responsibility for CAS compliance was housed at the corporate and segment levels because the CAS impact the entire business, not individual contracts. Tr. 1144-45. On questioning by the government, Mr. Faith testified that when he signed the agreement he did not have in mind any particular claims relating to the contracts or any particular intent to carve out any claims relating to the contracts. Tr. 1146-47.

e. Terrence Murphy

The parties also presented the testimony of Mr. Terrence Murphy, Raytheon's Assistant Controller for Government Accounting from 2000 to 2005, who testified regarding his involvement in preparing Raytheon's proposed Optical CAS 413 segment closing adjustment.⁴⁹ As Assistant Controller for Government Accounting, Mr. Murphy was Raytheon's primary interface with the DCMA's Raytheon Corporate Office, and was responsible for ensuring compliance with CAS and FAR requirements. Tr. 21-22. During his tenure with Raytheon, the company underwent a major restructuring that included the divestiture of the Optical segment. Tr. 22. In connection with this

⁴⁹ As previously mentioned, Mr. Murphy joined Raytheon in February of 1966. After a year in the manufacturing operation he participated in Raytheon's Financial Management Development Program. Mr. Murphy thereafter held a number of positions in the company before moving to corporate headquarters in the 1980s as a cost proposal coordinator for the corporation. Tr. 20-21. Mr. Murphy became a division controller for a division of the corporation, Microwave and Power Tube Division, in the early 1990s. Tr. 21. In the late 1990s, Mr. Murphy again became a corporate cost proposal coordinator. Tr. 21. In 2000, Mr. Murphy became the assistant controller for Government Accounting and worked in that capacity from until January of 2005, at which time he retired from Raytheon. Tr. 21.

restructuring, Mr. Murphy was responsible for finalizing Raytheon's corporate restructuring packages with the government and negotiating Raytheon's CAS 413 segment closing adjustments. Tr. 22, 29. Mr. Murphy collaborated with Mr. Michael Garvey, Raytheon's Director of Benefits Finance, on the government share calculations. Tr. 67. Mr. Murphy testified that in the entire period when he was negotiating the Optical CAS 413 segment closing proposal, the government never suggested to him that the novation agreement for Optical precluded Raytheon's CAS 413 claim. Tr. 62-63, 76, 123.

Mr. Murphy testified that during the time he was working on the Optical CAS 413 segment closing adjustment, he had no knowledge about the specific terms of the Optical novation agreement and was not involved in the creation of the novation agreement, though he was aware that a novation agreement was required when a business is sold to another business. Tr. 227-28. He also reemphasized that he never had any discussion with anyone from either Raytheon or the government about the terms of the Optical novation agreement until this litigation. Tr. 229.

f. Robert Cann

Raytheon presented the testimony of Robert Cann, a Raytheon corporate manager of Government Accounting from November of 2001 to 2005 and director of Corporate Government Accounting following the retirement of Mr. Murphy. Tr. 369. In both capacities, Mr. Cann was responsible for interfacing with the DCAA and the DCMA regarding government accounting issues at the corporate level. Tr. 369. Mr. Cann was responsible, along with Mr. Murphy, for computing the government's share of the

adjustment amount. Tr. 374. Along with Mr. Murphy, Mr. Cann was also responsible for preparing and negotiating Raytheon's corporate restructuring package with the government for the divestiture of the Optical segment, including Raytheon's CAS 413 segment closing adjustment proposal. Tr. 369-70, 389. Mr. Cann testified to a general understanding that a novation agreement was normally needed when a business was sold. Tr. 389. He further testified that during the negotiations regarding the Optical segment closing adjustment, the issue of the Optical novation agreement never came up, and that he never heard anyone say that the novation agreement precluded Raytheon's CAS 413 claim. Tr. 389. Mr. Cann further testified that he had no understanding one way or the other as to whether Raytheon had waived and transferred its Optical segment closing claim in the Optical novation agreement. Tr. 416-17.

g. Michael Garvey

Raytheon presented the testimony of Michael Garvey, Raytheon's Director of Benefits Finance from 2000 through May 2003, who testified regarding his involvement in preparing Raytheon's proposed Optical CAS 413 segment closing adjustment. Mr. Garvey submitted a CAS 413 calculation for Optical on October 9, 2001, PX 78, following Raytheon's receipt of an initial finding of CAS non-compliance on April 18, 2001, PX 257. Mr. Garvey submitted Raytheon's government share calculation for Optical on March 7, 2002. Tr. 273; PX 83. Mr. Garvey was responsible for working with Raytheon's Actuary, Mercer, to produce Raytheon's CAS 413 segment closing calculation for Optical. Tr. 255-56.

Mr. Garvey testified to receiving a DCAA Audit report on the CAS 413 segment closing calculation submitted by Raytheon in which the DCAA took no exception to the total pension deficit proposed by Raytheon or to Raytheon's proposed government pension share. Tr. 276-81; PX 84.

Mr. Garvey testified that in all his time working on the Optical segment closing calculations, no one ever suggested to him that Raytheon's CAS 413 claim for the Optical segment was waived by a novation agreement between Raytheon and the government. Tr. 293-94. Mr. Garvey further testified that the subject of novation agreements never come up in any context related to the CAS 413 segment closing and that he was never involved in any discussions related to the Optical novation agreement. Tr. 293-94, 330.

h. Deborah Tully

Raytheon presented the testimony of Deborah Tully, Raytheon's Director of Benefits Finance beginning in May 2003, when she replaced Michael Garvey. Tr. 427. Ms. Tully testified regarding her involvement in preparing Raytheon's proposed Optical CAS 413 segment closing adjustment.

In her role at Raytheon, Ms. Tully was responsible for helping to gather government participation data for the CAS 413 segment closing analysis for the Optical segment, a task that she worked on with Mr. Terrence Murphy. Tr. 443-445. Ms. Tully also requested the assistance of the DCMA and the DCAA in her search. Tr. 445.

Ms. Tully testified that in all her time working on the Optical segment closing calculations, no one ever suggested to her that Raytheon's CAS 413 claim for the Optical

segment was waived by a novation agreement. Tr. 452. Ms. Tully further testified that she had no understanding of novation agreements prior to this litigation. Tr. 457-58.

2. Findings of fact and conclusions of law

As with the AIS segment, the consistent and overwhelming evidence adduced at trial establishes that not one of the government or Raytheon employees involved in the processing and signing the Optical novation agreement or in the negotiations surrounding the Optical CAS 413 segment closing claim understood that the waiver set forth in the Optical novation agreement, which was taken from FAR 42.1204(i),⁵⁰ barred Raytheon's claim for payment of a pension deficit based on Raytheon's CAS 413 segment closing calculations.⁵¹ This consistent testimony from experienced government contract

⁵⁰ The text of the waiver is set forth above, but is repeated here for convenience:

(b) In Consideration of These Facts, the Parties Agree that by this Agreement:

(1) The Transferor confirms the transfer to the Transferee, and waives any claims and rights against the Government that it now has or may have in the future in connection with the contracts.

Optical novation agreement; see also FAR 42.1204(i)(b)(1).

⁵¹ To the contrary, the evidence again established that the government and Raytheon employees involved in the negotiations on both issues believed up until issuance of the DCMA/DCAA Joint Guidance in July 2004 that Raytheon was entitled to payment of the government's share of any pension deficit identified in the segment closing calculations undertaken after the Optical sale to B.F. Goodrich. Tr. 1367-69 (McGrath); Tr. 1179-81, 1192, 1199-1201 (Dowd); PX 84 (August 14, 2002 DCAA audit report accepting Raytheon's proposed government participation percentage and determining that the government's share of the Optical deficit would be \$8,182,463); PX 269 (April 22, 2003 letter from DCMA to Raytheon stating DCMA was in agreement with \$8,182,463 as the Optical deficit adjustment amount). The evidence established that both sides understood that Raytheon had not transferred its pension obligations. Optical Asset Purchase Agreement, PX 230.0048 ("The Seller will retain all liability and responsibility for the defined benefit pension plans maintained by Seller in which Transferred Employees participate as of the Closing Date . . ."). In addition, although a formal certified claim for that pension deficit was not filed until November 8, 2004, see PX 26, neither the government nor

specialists at both Raytheon and within the government has led the court to conclude for all of the reasons set forth above in connection with the AIS segment closing that the Optical novation agreement waiver did not extend to Raytheon's CAS 413 Optical segment closing claim. Because Raytheon retained the liability for the Optical pensions and did not transfer that liability to B.F. Goodrich, the government does not face any risk of double liability for the Optical pensions by virtue of the transfer of certain contracts. In addition, as discussed at length above, because a segment closing adjustment is not contract-specific, the claim arising from the Optical CAS 413 adjustment was not contract-specific and was thus not covered by the novation agreement. Accordingly, as with Raytheon's AIS CAS 413 segment closing claim, Raytheon's claim for payment of any Optical pension deficit based on its CAS 413 segment closing is not barred by the Optical novation agreement. The court therefore will consider Raytheon's Optical pension deficit claim.⁵²

Raytheon employees negotiating the CAS 413 segment closing adjustment understood that the waiver in the novation agreement barred their negotiations after the novation agreement was signed by all parties. The witnesses from both sides explained at trial that the novation agreement was in the form prescribed in FAR 42.1204(i). Government witnesses responsible for overseeing Raytheon's contracts and cost accounting compliance confirmed that they did not understand the novation agreement to have any bearing on the negotiations over Raytheon's CAS 413 Optical segment closing calculations. It was not disputed that the government employees who had been negotiating the CAS 413 segment closing adjustment did not learn that Raytheon had potentially waived its claim for payment of its CAS 413 segment closing deficit until they were told by government attorneys after the lawsuit was filed.

⁵² Having determined that the novation agreement does not bar the claim the court does not have to reach Raytheon's alternative claim that the waiver in the novation agreement was vitiated by the government's actions after the novation agreement was signed.

III. Segment closing calculations

A. AIS segment closing calculations

1. AIS findings of fact

As discussed above, Raytheon created the AIS segment on January 1, 1999 following a merger of various Raytheon holdings and sold the AIS segment to L-3 on March 8, 2002.⁵³ In addition, as discussed above, by the terms of the asset purchase agreement between Raytheon and L-3, Raytheon retained the pension plan assets and actuarial accrued liabilities for AIS. See PX 41.0112. The parties agree that under CAS 413-30(a)(20), the March 8, 2002 sale resulted in a “segment closing” requiring Raytheon to perform CAS 413-50(c)(12) segment closing calculations for each of the AIS segment’s defined benefit pension plans.

There were five Raytheon defined benefit pension plans covering AIS segment employees: 1) E-Systems, Inc. Salaried Employees Retirement Plan (“Greenville Salaried plan”); 2) Retirement Plan for Hourly Employees of Greenville Division of E-Systems, Inc (“Greenville Hourly plan”); 3) Raytheon E-Systems, Inc. Richardson/Waco Plan (“Richardson/Waco plan”); 4) Raytheon TI Systems Employees Pension Plan (“RTIS plan”); and 5) Raytheon Company Pension Plan for Salaried Employees (“Raytheon Salaried plan”).

⁵³ Raytheon created the AIS segment by consolidating various businesses that Raytheon had acquired when it bought E-Systems in 1995, CTAS in 1996, and TI Systems in 1997. Tr. 173 (Murphy); Tr. 708 (Winer); PX 19; DX 130. In each of those transactions, Raytheon acquired all of the pension assets and actuarial liabilities of the transferred entity and therefore no segment-closing adjustment was performed. Id.

For each plan, as discussed above, the CAS 413-50(c)(12) segment closing provision required Raytheon to calculate the difference between the market value of the pension assets and the actuarial accrued pension liability for the segment. In addition, under CAS 413-50(c)(12)(vi) Raytheon was charged with calculating the government's share of any surplus or deficit amount determined for the segment.⁵⁴ In the case of a deficit, the government share would be the amount owed by the government to Raytheon; in the case of a surplus, the government share would be the amount owed by Raytheon to the government.⁵⁵

⁵⁴ As previously noted, CAS 413-50(c)(12)(vi) states:

The Government's share of the adjustment amount determined for a segment shall be the product of the adjustment amount and a fraction. The adjustment amount shall be reduced for any excise tax imposed upon assets withdrawn from the funding agency of a qualified pension plan. The numerator of such fraction shall be the sum of the pension plan costs allocated to all contracts and subcontracts (including Foreign Military Sales) subject to this Standard during a period of years representative of the Government's participation in the pension plan. The denominator of such fraction shall be the total pension costs assigned to cost accounting periods during those same years. This amount shall represent an adjustment of contract prices or cost allowance as appropriate. The adjustment may be recognized by modifying a single contract, several but not all contracts, or all contracts, or by use of any other suitable technique.

Id.

⁵⁵ CAS 413-50(c)(12)(vii) provides a mechanism for this settling-up, as follows:

The full amount of the Government's share of an adjustment is allocable, without limit, as a credit or charge during the cost accounting period in which the event occurred and contract prices/costs will be adjusted accordingly. However, if the contractor continues to perform Government contracts, the contracting parties may negotiate an amortization schedule, including interest adjustments. Any amortization agreement shall consider the magnitude of the adjustment credit or charge, and the size and nature of the continuing contracts.

Id.

As noted above, AIS and the other segment sales at issue in this case were part of a corporate restructuring program that Raytheon began in 2000. In addition to these segments, some of the segment sales involved pension surpluses, including the RE&C, Semiconductor, and Montek segment closings. See supra note 9; Tr. 46-47, Tr. 74-75 (Murphy). During the process of reviewing Raytheon's segment closing adjustment and government share calculations, the government contracting officers and Raytheon engaged in a broad effort to resolve all of the surplus and deficit segment closures together, including a plan to settle all the CAS 413 segment closings individually while determining the final amount owed collectively by offsetting deficits and surpluses. Tr. 1348-49 (McGrath); PX 333.

In December 2000, Raytheon submitted its first CAS 413 segment closing adjustment proposal for the surplus RE&C segment. Tr. 31-32 (Murphy); Tr. 1176 (Dowd). Raytheon and government representatives initially agreed to use RE&C as a model for the other segment closing adjustments, delaying submission of other CAS segment closing adjustment proposals until after the audit of the RE&C proposal was completed. Tr. 32-33 (Murphy); 1175 (Dowd); 358 (Garvey) (RE&C was to be used "as a template" for the rest of the segment closing submissions). However, the government later changed course and determined that it could not offset segment deficits and segment surpluses. Rather each segment closing would be resolved separately. PX 343; Tr. 33 (Murphy).

For each segment closing, including AIS, Raytheon submitted its segment closing analysis of pension assets and liabilities based on the calculations made by its pension

actuary Mercer. Mercer also prepared reports on its analysis of the pension assets and liabilities of the various segments for review by the DCMA CIPR Center and the DCAA. The DCMA CIPR Center was responsible for reviewing Raytheon's calculation of the pension plan surplus or deficit amount. Tr. 530 (Dyer); Tr. 607-08 (Sheley⁵⁶); PX 45. The DCAA was responsible for auditing the government share calculations of that amount. Id.

The lead Mercer actuaries who worked on these calculations and who testified at trial were Mr. Jonathan Barry (for the AIS and Aerospace segment), Mr. James Winer (for the Optical segment), and Ms. Deborah Tully⁵⁷ (for the alleged PWF segment). Though specific actuaries took the lead in each segment, they worked together reviewing one another's reports before submitting Raytheon's calculations to the government for review. Tr. 884-85 (Barry).

Raytheon first submitted its AIS segment closing calculations to the government on July 12, 2002. See PX 56. In brief, Mercer determined that the assets and liabilities attributable to the AIS segment from the various pension plans associated with AIS resulted in a deficit. The government reviewers charged with analyzing Mercer's work did not raise any concerns with Mercer's analysis of the segment closing deficit

⁵⁶ Seay Anne Sheley is the regional special programs manager for the DCAA's regional office in Lowell, Massachusetts and previously held the position of contract audit coordinator ("CAC") assigned to DCAA's Raytheon corporate office from January 2002 to December 2005. Tr. 603-04 (Sheley). Ms. Sheley testified regarding her role in coordinating DCAA's audit reviews of the Raytheon segment closings at issue in this case. Tr. 605-07 (Sheley).

⁵⁷ Deborah Tully later was later hired by Raytheon to replace Michael Garvey as Raytheon's Director of Benefits Finance, beginning in May 2003. Tr. 427; see also supra Part II.A.1.h.

amount.⁵⁸ Raytheon's submission to the government included the then-uncontested segment closing deficit amount but did not include a calculation of the government's share of the adjustment amount. According to Raytheon, it did not have enough data to prepare the government share calculation. Tr. 282-83 (Garvey). Raytheon employees testified that Raytheon had difficulty in collecting pension cost data, which the company did not typically maintain prior to the revision of CAS 413 in 1995. Tr. 45-47 (Murphy); Tr. 374-75 (Cann); Tr. 445 (Tully).

In order to find the data necessary to prepare a government share calculation, Raytheon and government witnesses testified that Raytheon worked with the purchaser L-3, as well as the DCMA and the DCAA, to prepare "a reasonable determination of the government participation." Tr. 375 (Cann). In order to assist Raytheon, on January 7, 2003, the contracting officer forwarded Raytheon's request to the DCAA seeking assistance in gathering government participation data for the AIS segment. See PX 87. Based on the information it had collected through this process, Raytheon, on February 25, 2003, submitted its calculation of the government's share of the AIS segment pension deficit. PX 57. The calculation used sales data provided by L-3 for the years 1998 through 2001. Id.; Tr. 93-94 (Murphy). Raytheon did not use pension cost data. Raytheon noted that it based its analysis on the limited number of years for which it had government sales data. Raytheon in its submission again requested government

⁵⁸ In fact, the DCMA CIPR Center did not question Mercer's segment closing adjustment calculations analysis in preparing their segment closing adjustment for AIS or any of the other segments, with the exception of PWF. Tr. 44-45, 92 (Murphy); PX 99.

assistance in searching for any DCAA audit reports that might better inform the government participation analysis. PX 57.

During this same time frame, Raytheon provided similar government share calculations based on sales data for all segments, whether they were in surplus or deficit positions. Tr. 46-47 (Murphy) (“[I]f, for example, 75 percent of the sales were U.S. Government CAS covered contracts then we would apply the 75 percent to either the surplus or the deficit to come up with the government share.”). The government ultimately agreed to settle surplus segments on the sales data approach. Id.

On July 17, 2003, the DCAA issued an audit report stating that Raytheon’s segment closing calculation for the AIS segment was noncompliant with CAS 413-50(c)(12)(vi) because the calculation was (a) based on sales data rather than pension costs and (b) based on an unrepresentative government participation period. PX 99.0001, .0003. The audit report did not identify any issues with respect to Raytheon’s calculation of the pension deficit. By letter dated August 11, 2003, the contracting officer notified Raytheon of his initial finding that Raytheon was in noncompliance with CAS 413-50(c)(12)(vi) for the same two reasons stated in the July 17, 2003 DCAA audit report. PX 337. The contracting officer stated: “Raytheon has provided some additional information since its CAS 413 calculation was submitted to the Government in July 2002. Nevertheless, the Government still does not have the pension cost data, nor adequate support for a representative period, to be able to properly determine any adjustment under CAS 413.” Id.

As also discussed above, in July 2004, the DCMA and the DCAA issued a Joint Guidance for implementing the Federal Circuit's ruling in Allegheny Teledyne. See Tr. 1369 (McGrath); DX 114. In August 2004, the government issued letters to Raytheon seeking payment on the two of the segments with a pension surplus, and on September 21, 2004, Raytheon issued payment to the government to settle those surplus segment closures.⁵⁹ Thereafter, on September 30, 2004, the contracting officer denied Raytheon's request for the government to fund its share of the AIS CAS 413 segment closing deficit. Tr. 1368-69, 1375 (McGrath); PX 299. Relying upon the DCMA/DCAA Joint Guidance, see supra note 21, the contracting officer rejected Raytheon's AIS segment closing deficit analysis because Raytheon had failed to fund the AIS pension costs by the federal tax deadline for the year of the segment closing. Tr. 1370 (McGrath); PX 299. There was no mention of any problems with Raytheon's calculations.

By letter dated January 24, 2005, Raytheon submitted a certified claim⁶⁰ for the government's share of the AIS segment closing adjustment, including a government share

⁵⁹ [T]he Government's share [for the Montek segment] was \$487,305. On August 30, 2004, the Government . . . requested that Raytheon pay the adjustment. . . . On September 21, 2004, Raytheon submitted a check for the segment closing adjustment, but refused to pay interest.

. . . The parties disputed the appropriate amount of [the Government's share for the RE&C segment] for some time, and eventually settled on a Government share of \$14,681,268. On August 31, 2004, the Government requested payment of the calculated adjustment, as well as simple interest on that amount dating back to the segment closing. On September 21, 2004, Raytheon submitted a check for the segment closing adjustment, but refused to pay interest.

Gates, 584 F.3d at 1065.

⁶⁰ The CDA sets forth the following requirements for claim certification:

calculation based upon sales data. PX 19. The contracting officer denied Raytheon's certified claim in its entirety in a final decision dated March 7, 2005. PX 20. The primary reason stated by the contracting officer for denying Raytheon's certified claim was Raytheon's failure to fund the pension costs in the current tax year pursuant to FAR 31.205-6(j)(1)(i) and (j)(2)(i)(A). PX 20. Mr. McGrath, the contracting officer, noted that the government also questioned Raytheon's reliance on sales data to determine the government share, stating as follows:

Although a moot point because the Government has no intention of sharing in this pension deficit adjustment, the Government sees nothing in CAS 413-60(c)(9) that allows the use of CAS-covered sales as a proxy for pension plan costs in determining the amount of the Government's share.

Tr. 1373-74; PX 20.

At trial, Raytheon presented expert testimony from Mr. Steven Vernon⁶¹ to support its claim for \$56,274,371.39 from the government in connection with sale of the

For claims of more than \$100,000, the contractor shall certify that the claim is made in good faith, that the supporting data are accurate and complete to the best of his knowledge and belief, that the amount requested accurately reflects the contract adjustment for which the contractor believes the government is liable, and that the certifier is duly authorized to certify the claim on behalf of the contractor.

41 U.S.C. § 605(c)(1) (this provision of the CDA is now codified at 41 U.S.C. § 7103(b)).

⁶¹ Mr. Vernon has been a consulting actuary for 36 years. He is a member of the Society of Actuaries and for a period in his career was an enrolled actuary under ERISA. Tr. 1582. Among his positions, Mr. Vernon was an actuary at the consulting firm Watson & Wyatt for 25 years, retiring as a Vice President in 2006. Tr. 1582. At Watson & Wyatt, Mr. Vernon had experience with many large government contracting clients doing ongoing annual evaluations for both pension and post-retirement benefits, including assisting clients with the 1995 amendments to the CAS. Tr. 1582-83. Mr. Vernon has served as an expert witness in trials concerning CAS issues, including the Teledyne case. Tr. 1583. In his retirement, Mr. Vernon has started his own

AIS segment to L-3. The government presented expert testimony from Mr. Colin England⁶² challenging various aspects of Raytheon's segment closing adjustment calculations in connection with the three AIS-related pension plans remaining at issue based on earlier court rulings:⁶³ Richardson/Waco, RTIS, and Raytheon Salaried. The government also presented testimony challenging Raytheon's calculations of the government share of the adjustment for each plan, except for the Raytheon Salaried plan.⁶⁴ In this connection, the government offered testimony with alternative calculations showing that the total government share of the AIS segment's overall deficit was \$47,245,055.

company and written several books to assist private individuals in managing their 401(K) plans. Tr. 1583. Mr. Vernon also volunteers on committees for the Society of Actuaries and the American Academy of Actuaries. Tr. 1584.

⁶² Mr. England is a Fellow of the Society of Actuaries, an Enrolled Actuary, and a Fellow of the Conference of Consulting Actuaries. He has more than 30 years of experience consulting on the design, funding, accounting compliance, termination, and other issues involving defined benefit, defined contribution, qualified, and non-qualified pension plans. Tr. 1864; DX 241.0002. The court has previously determined that Mr. England may testify regarding his understanding of how the actuarial terms used in the CAS should be applied and offer his opinion regarding the application of the actuarial terms and concepts embodied in the CAS both in this case, see Order, Raytheon v. United States, No. 05-448C, 2009 WL 1373959 (May 13, 2009), and in Gen. Motors Corp. v. United States, 78 Fed. Cl. 336, 340 n.15 (2007).

⁶³ With respect to the Greenville Salaried plan and Greenville Hourly plan, the court previously held that the government could not challenge Raytheon's asset and liability segment closing adjustment calculation, following the government's judicial admission to the court that those calculations were not in dispute. See Order on Mot. to Strike, Dec. 14, 2010, ECF No. 199.

⁶⁴ While AIS employees were participants in the Raytheon Salaried plan, no pension costs for that plan were charged to any AIS contracts and no pension contributions were made to the plan for any AIS employees. See PX 19.0002 at n.1. Accordingly, the parties agree that the government's participation percentage, and hence its share of the Raytheon Salaried plan's segment closing adjustment, is zero.

Raytheon's trial expert, Steven Vernon, presented calculations for each AIS pension plan as set forth on the chart below:

Pension Plan	Surplus/(Deficit)
Greenville Salaried	(\$58,187,419)
Greenville Hourly	(\$13,260,688)
Richardson/Waco	\$176,462
RTIS	(\$82,071)
Raytheon Salaried	\$3,097,023
Total AIS Segment Closing Adjustment	(\$68,256,693)

PX 428.0024. With regard to the government's share of the AIS (\$68,256,693) pension deficit, Raytheon presented evidence to show the government's share of that pension deficit equal to \$56,274,371.39, based on the following totals:

	A. Government Participation Numerator	B. Government Participation Denominator	C. Government Share Percentage (A/B)	D. Surplus/ (Deficit) Amount	Total Government Share Surplus/ (Deficit) (C x D)
Greenville Salaried/ Hourly	\$135,828,017.00	\$172,249,066.00	78.8555898469%	(\$71,448,107.00)	(\$56,340,826.21)
Richardson/ Waco	\$8,546,760.00	\$11,125,883.00	76.8187118272%	\$176,462.00	\$135,555.84
RTIS	\$64,961,674.00	\$77,154,720.00	84.1966298368%	(\$82,071.00)	(\$69,101.02)
Raytheon Salaried	N/A	N/A	0.000%	\$3,097,023	\$0.00
AIS – Total					(\$56,274,371.39)

See PX 428.0024, .0054; see also PX 19.

Mr. England, on behalf of the government, challenged some of the data and several of the assumptions used by Mr. Vernon to calculate Raytheon's AIS pension assets and liabilities. Mr. England testified that in his opinion Raytheon's AIS pension deficit was \$66,215,724, or \$2,040,969 less than Mr. Vernon's calculations, broken down as follows:

Pension Plan	Surplus/(Deficit)
Greenville Salaried	(\$58,187,419)
Greenville Hourly	(\$13,260,688)
Richardson/Waco	\$682,593
RTIS	(\$150,493)
Raytheon Salaried	\$4,700,283
Total AIS Segment Closing Adjustment	(\$66,215,724)

DX 241.0005. The government also challenged Raytheon's government share calculations. The government presented non-expert testimony and evidence to show that the government's share of the AIS segment closing deficit was \$47,245,055:

Plan (1)	Surplus/ (Deficit) (2)	Government Share Percentage (3)	Government Share (4) = (2) x (3)
Greenville Salaried	(58,187,419)		(38,710,808)
Original CAS Period	(25,157,449)	49.99%	(12,576,491)
Revised CAS Period	(33,029,970)	79.12%	(26,134,317)
Greenville Hourly	(13,260,688)		(8,822,044)
Original CAS Period	(5,733,285)	49.99%	(2,866,134)
Revised CAS Period	(7,527,403)	79.12%	(5,955,910)
Richardson/Waco	682,593		415,731
Original CAS Period	538,361	58.27%	
Revised CAS Period	144,232	70.74%	
RTIS	(150,493)		(127,934)
Original CAS Period	0	0.00%	0
Revised CAS Period	(150,493)	85.01%	(127,934)
Raytheon Salaried	4,700,283		0
Original CAS Period	4,700,283	0.00%	0
Revised CAS Period	0	0.00%	0
AIS – Total			(47,245,055)

Tr. 1445-92; DX 111; DX 112; DX 130; DX 178; DX 178A.

2. Standard of review

Before turning to the government's specific objections to Raytheon's AIS segment closing deficit calculation, the court first notes that under the CDA, the court reviews the contracting officer's decision de novo. 41 U.S.C. § 609(a)(3) (this provision of the CDA

is now codified at 41 U.S.C. § 7104(b)(4)). The court also notes that in this case the burden of proof is on the government to establish that Raytheon's segment closing calculation violated the CAS. See Gen. Dynamics Corp., ASBCA No. 56744, 11-2 BCA ¶ 34,787, 2011 WL 2624447 (citing Ball Corp., ASBCA No. 49118, 00-1 BCA ¶ 30,864, 2000 WL 362429).⁶⁵ In evaluating the government's contention that Raytheon's calculations do not comport with the CAS, the court looks to any guidance the CAS Board ("CASB") has published. Perry v. Martin Marietta Corp., 47 F.3d 1134, 1137 (Fed. Cir. 1995). In addition, as with any provision of the CAS, the court will read the subject CAS section "together with the other provisions of the regulation" in order to ensure that the court construes the CAS provision in context. Gen. Elec. Co. v. United States, 92 Fed. Cl. 798, 812 (2010). Finally, to the extent the CAS requirements are not clear from the face of the regulation or available CASB guidance, the court will consider "how various actuarial terms found in CAS 413 are used in practice" to guide its decision. Gen. Motors Corp., 78 Fed. Cl. at 338 n.9. In this connection, the court recognizes that there may be more than one correct approach to a CAS calculation. As the CASB noted in the Preamble to the Revised CAS 412 and CAS 413, "the sophistication of modern actuarial valuations" enables the use of "actuarial assumptions that are individually reasonable." 60 Fed. Reg. 16,534, 16,535 (Mar. 30, 1995).

⁶⁵ Although decisions of the Armed Services Board of Contract Appeals ("ASBCA") "are not accorded stare decisis effect," the court may find the reasoning contained therein persuasive. W. Bay Builders, Inc. v. United States, 85 Fed. Cl. 1, 29 n.29 (2008) (quoting Universal Restoration, Inc. v. United States, 16 Cl. Ct. 214, 218 (1989)).

It is against this backdrop that the court will first address the disputes with respect to the calculation of assets and liabilities that gave rise to the overall AIS segment closing deficit. These include: 1) Raytheon's accounting for retirees and other "inactives"; 2) Raytheon's use of linear interpolation for estimating the value of pension plan assets; 3) Raytheon's retirement assumptions upon the sale of a segment; 4) Raytheon's inclusion of phased-in-benefits in calculating pension liabilities; and 5) Raytheon's use of allegedly out-of-date benefit payment data in rolling forward pension assets and liabilities for one of the AIS pension plans. After addressing these issues, the court will turn to the parties' disputes over the calculation of the government's share of the AIS segment closing pension deficit.

3. The government has not met its burden with regard to Raytheon's calculation of the AIS segment closing adjustment deficit based on the calculation of plan assets and liabilities

a. Raytheon's search for inactives

One of the major differences between the parties' treatment of the AIS pension assets and liabilities relates to the treatment of "inactive" employees in Raytheon's calculations. "Inactives" are those employees who stopped working for the segment prior to the segment closing and who are either receiving or are entitled to receive a pension based on their work for the segment.⁶⁶ In its pension asset and liability calculations,

⁶⁶ CAS 413 does not provide an explicit definition of "inactive" pension plan participants. CAS 413 defines a "pension plan participant" as follows:

any employee or former employee of an employer, or any member or former member of an employee organization, who is or may become eligible to receive a benefit from a pension plan which covers employees of such employer or

Raytheon included only those inactives who Raytheon identified as having “last worked” at AIS prior to stopping work at Raytheon. Mr. England contends that Raytheon erred in limiting its segment closing adjustment calculations to only those employees who had “last worked” at AIS. Mr. England asserts that the AIS segment grew out of components that pre-existed the creation of AIS and that Raytheon was obligated under the CAS to include inactive pension plan participants from the business units that made up AIS in its calculations. Mr. England contends that Raytheon, by failing to account for all of the inactives, failed to include a correct value for the assets and liabilities subject to the segment closing calculation. According to Mr. England, where the data were missing, Raytheon should have included an estimate of inactives. Had it done so, Mr. England opines, in those plans with a surplus, the surplus would have increased. Tr. 1872.⁶⁷ Mr. England acknowledges that by including inactives in situations where there is a plan

members of such organization who have satisfied the plan’s participation requirements, or whose beneficiaries are receiving or may be eligible to receive any such benefit.

CAS 413-30(a)(13). CAS 413 further defines an “active” pension plan participant as “a participant whose employment status with the employer has not been terminated.” Id. Accordingly, an “inactive” plan participant is fairly understood to mean a participant whose employment with the employer has been terminated.

⁶⁷ For the AIS segment, the only plan in which Mr. England has raised the inactives issue and in which such a surplus exists is the Raytheon Salaried plan. However, as previously discussed, the government’s participation percentage for the Raytheon Salaried plan in the AIS segment is zero, Tr. 2081 (England), PX 428.0054, and therefore the exclusion of any inactive Raytheon Salaried participants would have no effect on the government share of the AIS segment closing adjustment. Mr. England contends, however, that for the Nonbargaining plan in the Optical segment missing inactives may account for a large surplus.

deficit, such as in the RTIS plan,⁶⁸ the AIS deficit would be larger. Id. Mr. England contends, however, that the CAS compels this result.

Raytheon does not dispute that the assets and liabilities for inactive plan participants had to be included in the segment closing adjustment calculation. Tr. 801-02 (Mr. Winer, a Mercer actuary who prepared the original Raytheon calculations, confirmed that such inactives must be included in the CAS 413 liability calculation); Tr. 1694-95 (Vernon) (including such inactives is “mandatory” under CAS 413 if records can be located); see Gen. Elec. Co. v. United States, 60 Fed. Cl. 782, 795-96 (2004). Raytheon argues in response to Mr. England’s criticisms, however, that it fulfilled its CAS 413 obligations by including in its calculations the inactives who had “last worked” at AIS. Raytheon argues that it did not have a CAS obligation to include in its calculation the pension assets and liabilities of inactives that may have worked in the business units that later became AIS. Raytheon contends that without adequate records from the former business units to determine inactives from earlier units, Raytheon’s decision to limit its inclusion of inactives to those who had “last worked” at the AIS segment met the requirements of the CAS.

The dispute over the inclusion of “inactives” is an issue that arises only in the context of composite pension plans, in which the pension assets and liabilities for many segments are accounted for in a single plan, as opposed to pension plans that are

⁶⁸ With respect to the AIS segment and alleged PWF segment, in the case of the RTIS plan, because RTIS has a pension deficit, the exclusion of any of inactive RTIS participants operates to the benefit of the government, because any additional inactive participants would increase the amount of the deficit. Tr. 851 (Barry); Tr. 1830 (Vernon); Tr. 2081 (England).

accounted for on a segment-by-segment basis. Tr. 1948 (England) (“The inactive participants are only excluded when Raytheon used composite accounting.”). For the AIS segment, Raytheon accounted for the RTIS plan and Raytheon Salaried plan on a composite basis. Tr. 2081 (England). Where the pension plan has been accounted for on a composite basis, reconstructing the work history of each plan participant who may have moved from one business unit or segment to another is not only difficult, but can be impossible because there are no records.

CAS 413-50(c)(12)(ii)⁶⁹ provides that when a segment using composite accounting closes, the contractor must use the methods in CAS 413-50(c)(5)⁷⁰ to allocate

⁶⁹ “In computing the market value of assets for the segment, if the contractor has not already allocated assets to the segment, such an allocation shall be made in accordance with the requirements of paragraphs (c)(5)(i) and (ii) of this subsection.” CAS 413-50(c)(12)(ii).

⁷⁰ CAS 413-50(c)(5) states, in relevant part, as follows:

[T]here shall be an initial allocation of a share in the undivided market value of the assets of the pension plan to th[e] segment, as follows:

(i) If the necessary data are readily determinable, the funding agency balance to be allocated to the segment shall be the amount contributed by, or on behalf of, the segment, increased by income received on such assets, and decreased by benefits and expenses paid from such assets. Likewise, the accumulated value of permitted unfunded accruals to be allocated to the segment shall be the amount of permitted unfunded accruals assigned to the segment, increased by interest imputed to such assets, and decreased by benefits paid from sources other than the funding agency; or

(ii) If the data specified in paragraph (c)(5)(i) of this subsection are not readily determinable for certain prior periods, the market value of the assets of the pension plan shall be allocated to the segment as of the earliest date such data are available. Such allocation shall be based on the ratio of the actuarial accrued liability of the segment to the plan as a whole, determined in a manner consistent with the immediate gain actuarial cost method or methods used to compute pension cost.

a portion of the composite pension plan's assets to the closed segment.⁷¹ CAS 413-50(c)(5) provides two alternate methods for allocating composite plan assets to a segment. Section (c)(5)(i) provides for an allocation of pension plan assets based on the prior contributions attributable to the segment to the composite pension plan and the subsequent income, benefits, and expenses that have been "contributed by, or on behalf of, the segment." This (c)(5)(i) method is used if the "necessary data [as prescribed by (c)(5)(i)] are readily determinable."⁷² If, however, such data are not readily determinable "for certain prior periods," then the contractor must use the approach set forth in Section (c)(5)(ii), "as of the earliest date such data are available." The (c)(5)(ii) approach requires the allocation of the assets of the pension plan "based on the ratio of the actuarial accrued liability of the segment to the plan as a whole." The critical factor, therefore, in choosing between these two approaches is whether the data "are readily capable of being determined" for all prior periods, rather than merely certain periods. The Mercer report demonstrates that for the AIS segment, Raytheon relied on the ratio required under (c)(5)(ii) to calculate the assets and liabilities for the Raytheon Salaried Plan and the RTIS Plan. PX 56.0002 ("Per CAS 413-50(c)(5)(ii), when a group has not historically been tracked by segment, the . . . assets attributable to a given group of employees is

Id.

⁷¹ Under CAS 413-50(c)(12)(i), "[t]he determination of the actuarial accrued liability shall be made using the accrued benefit cost method. The actuarial assumptions employed shall be consistent with the current and prior long term assumptions used in the measurement of pension costs."

⁷² This term is not defined in the CAS, but ordinarily "determinable" means "capable of being determined." *See, e.g.,* Webster's Third New International Dictionary 616 (1986) (defining "determinable" as "capable of being determined, definitely ascertained, or decided upon").

equal to the ratio of the Accrued Liability (AL) for the group over the Accrued Liability for the entire plan.”).

After reviewing Raytheon’s calculations for AIS, Mr. England noted that there were no assets or liabilities attributable to inactive participants included in Raytheon’s segment closing adjustment calculations for the composite RTIS and Salaried Pension Plans. Mercer’s initial segment closing calculations for those plans did not include any inactive participants. Tr. 849 (Barry); Tr. 2081 (England). Mr. England testified that Mercer’s calculations were flawed because Raytheon failed to include inactive participants. Tr. 1943-44. Mr. England pointed to two primary pieces of evidence to support his opinion that inactives should have been included in Raytheon’s calculation for the AIS portion of the RTIS and Salaried plans. First, Mr. England noted that inactives for the Salaried plan as a whole accounted for 62 percent of the total plan liability, and yet Raytheon’s AIS segment calculation did not match that division between actives and inactives. DX 241.0049; Tr. 1942-44. Second, Mr. England noted that inactives should have been included in the calculation because in two other AIS plans accounted for on a segment-by-segment basis, the Greenville Salaried plan and the Greenville Hourly plan, inactives represented 63.87 percent and 52.14 percent of the total AIS segment liability, respectively. Tr. 1942. In Mr. England’s opinion, if other units making up AIS had a significant number of inactives, then the same should be true for the RTIS and Salaried plans.

In order to correct for this alleged error in Raytheon’s calculations, Mr. England performed a calculation for each composite pension plan in which he estimated the

number of inactive plan participants he believed were likely to have been omitted in Raytheon's search. Mr. England utilized two different methods for estimating inactives in his segment-closing calculations. In one, he used a ratio based on the number of plan participants, and in the other, he used a ratio based on plan liabilities. Tr. 1949-50; DX 241.0054. For the RTIS plan, he assumed that the percentage of the RTIS plan's inactive members attributable to the AIS segment was the same as the percentage of the RTIS plan's active members attributable to the AIS segment. He based this calculation on existing data for active members in the RTIS plan as a whole and active members in the RTIS plan who were also in the AIS segment. Tr. 1949. He then took that ratio and applied it to the RTIS plan inactives. Id. ("[I]f active participants were one percent of the total, we assumed that there was also one percent of the inactives."). For the Salaried plan, he assumed that the percentage of the Salaried plan's inactive member liability attributable to AIS inactive members was the same as the percentage of the Salaried plan's active member liability attributable to AIS active members. Tr. 1950. Again, he applied the ratio of AIS active member liability to the plan as a whole to come up with a number for AIS inactive member liability. Id. Based on his calculations, Mr. England testified that Raytheon had understated the RTIS plan deficit by \$93,417 and understated the Salaried plan surplus by \$1,591,902. See DX 161.0039.

While Mr. England challenged Raytheon's use of the "last place worked" approach to search for inactives, the evidence presented established that Raytheon's search for inactives using the "last place worked" approach was thorough and that under that approach Raytheon reasonably concluded that there were no AIS "inactives"

associated with the RTIS and Salaried plans. In order to determine whether its segment closing calculations omitted inactive participants in the RTIS and Raytheon Salaried plans associated with the AIS segment, Raytheon had the Raytheon Benefits Center⁷³ and Mercer search their records for participants in the composite plans to determine their last place worked at Raytheon. The search for inactives for AIS was conducted by Jonathan Barry, a Mercer actuary. See PX 18 at App. A. Mercer provided the following explanation of the process used for AIS:

Raytheon requested that its benefit administrator, the RBC [Raytheon Benefits Center], create a listing of all terminated and retired employees who worked in the affected business units at one time. Using the “last place worked” methodology, Mercer then reviewed the listing to capture data on all participants who terminated or retired from Raytheon at the time they were in one of these business units. We did not find any additional AIS . . . participants.[⁷⁴]

Id. at App. A. Mercer also searched its databases in an effort to discover additional inactives.⁷⁵ Tr. 850 (Barry); Tr. 697 (Winer). It was not until after Mercer conducted its search that Raytheon determined there were no inactive participants in the RTIS or Raytheon Salaried plans who had last worked for the AIS segment. Id.; Tr. 850-51 (Barry).

⁷³ The Raytheon Benefits Center is a third party vendor that provides benefits administration for Raytheon. Tr. 798 (Winer).

⁷⁴ Mercer used the same approach to find inactives associated with PWF business units. PX 18 at App. A.

⁷⁵ Mercer has been the pension actuary for Raytheon since the 1940s and maintains a database for each of the Raytheon pension plans for which Mercer performs valuations. Tr. 671 (Winer); Tr. 850 (Barry). Mercer was also the pension actuary for TI, E-Systems, and CTAS, portions of which were combined to form AIS, and Mercer has records of inactive participants from the pension plans sponsored by those companies. Tr. 893-94 (Barry); Tr. 800 (Winer).

Raytheon argues that there are three further reasons why there might not have been any inactives from the AIS segment associated with these composite plans. First, the AIS segment was in existence for only a short period of time compared to the pension plans as a whole, having been established in 1999 and closed on March 8, 2002. Thus, one might reasonably expect that fewer participants would have retired or terminated from AIS than from the pension plans as a whole. Second, in the case of RTIS, AIS had only thirty-four active participants in the plan and in a group that small, one might expect to find few or no inactive participants. Third, Mr. Vernon, Raytheon's expert actuary, also testified that in the case of RTIS, because participants could elect a lump sum payout or five-year certain annuity, if a participant elected one of those options, a common election in Mr. Vernon's opinion, the participant's liabilities would no longer be identified as part of the AIS segment after five years. Tr. 1603-04 (Vernon).⁷⁶

As previously stated, CAS 413-50(c)(12) requires that the contractor undertake a segment accounting exercise to determine the pension assets allocable to the closed segment pursuant to CAS 413-50(c)(5). See CAS 413-50(c)(12)(ii); Gen. Elec. Co., 60 Fed. Cl. at 796. Regardless of whether the data are readily determinable for all prior periods, requiring use of the (c)(5)(i) method, or are available for only certain prior periods, enabling use of the (c)(5)(ii) method, a contractor must allocate composite plan assets based as closely as practicable upon the actual experience of the segment in the

⁷⁶ Though terming it "unlikely," Mr. England acknowledged at trial that for the RTIS plan it was possible that zero inactives was correct, because the RTIS plan as a whole had only 6.6 percent inactives and had only thirty-four active employees in the AIS segment. DX 241.0051; Tr. 1944-45 (England). In other words, he agreed that it was possible that no RTIS plan participant had ever retired or terminated with a benefit from the AIS segment. Id.

plan. The testimony and evidence introduced at trial and summarized above established that Mercer's search for inactive participants who "last worked" at Raytheon's AIS segment was thorough and reasonable and that Mercer was not able to attribute any inactives to AIS from the subject plans based on the available records. Without specific evidence to show that Raytheon failed to include known inactives from units that made up AIS in its calculations regarding the RTIS plan or Salaried plan, the court cannot say that Raytheon failed to comply with the CAS. Mr. England's methods for estimating inactives are not mandated by any specific requirement in the CAS nor are they identified as required methods in any CAS guidance. In such circumstances, the court is not prepared to find that a calculation based on available and verifiable data is unsupported. Accordingly, the court concludes that Raytheon's reliance on the last place worked methodology to determine the share of pension assets attributable to the AIS segment was compliant with CAS 413-50(c)(12).

b. Raytheon's use of linear interpolation

Another major government objection to Raytheon's calculation involves Raytheon's use of linear interpolation when the actual value of total plan assets is not available at the time of the segment closing. This dispute implicates each of the pension plans in dispute in the AIS segment, including the Richardson/Waco plan, RTIS plan, and Salaried plan. CAS 413-50(c)(12)(iii) requires that the market value of the assets on the day of the segment closing be used, unless using that date would result in an inequitable

calculation. Id.⁷⁷ The AIS segment closed on March 8, 2002, on a day other than the first of the month.⁷⁸ Because the assets in Raytheon's pension plans were valued on the first day of the month, the actual market value of the pension plan assets were not available for the date of the segment closing.⁷⁹ As a result, Raytheon's actuary used an estimation method based on linear interpolation to determine the market value of the assets on that date. Mr. England, on behalf of the government, challenged that approach and opined that the CAS required another estimation method as being the most reasonable under actuarial standards of practice.

The evidence established that in performing Raytheon's segment closing calculations, Raytheon's actuary, Mercer, utilized linear interpolation to estimate the assets held in each of the pension plans associated with the AIS segment on the date of the AIS segment closing. Linear interpolation is a relatively straight forward method of

⁷⁷ "The calculation of the difference between the market value of the assets and the actuarial accrued liability shall be made as of the date of the event . . . that caused the closing of the segment." Id. If the date of the segment closing "is not readily determinable, or if its use can result in an inequitable calculation, the contracting parties shall agree on an appropriate date." Id.

⁷⁸ This issue is also potentially relevant in the CAS segment closing adjustment calculation for the alleged PWF segment, which closed on April 21, 2000. Because the Optical segment, which closed on March 1, 2001, closed on the first of the month, no asset estimation technique is necessary to value the assets of the Nonbargaining plan for that segment. With respect to the plans at issue in the Aerospace segment, which closed on June 8, 2001, the court previously held that the government could not challenge Raytheon's asset and liability segment closing adjustment calculation, following the government's judicial admission to the court that those calculations were not in dispute. See Order on Mot. to Strike, Dec. 14, 2010, ECF No. 199; see also infra Part III.D.

⁷⁹ Although Mr. England testified that, in his experience, it is possible to request actual asset values on dates other than the first of the month, Tr. 1898-99 (England), Mr. England's fourth report acknowledges pension trust asset statements are typically only prepared once a month. See DX 161 at 18.

estimation. In this case, the practice involved three basic steps. First, Raytheon took the value of the assets in a pension plan on the first day of the month in which a segment closing occurred and the value of the assets in that pension plan on the first day of the month following the segment closing and determined the difference in the two values. Second, Raytheon divided the difference in the value of the assets held by the pension plan by the number of days in the month to determine an average daily gain or loss for the month. Finally, Raytheon multiplied this average daily gain or loss against the number of days in the month, pro-rating the total growth or loss to the date of the segment closing.

Mr. England opined that this approach was in error and that Raytheon, instead, should have used proxy indices. In Mr. England's opinion, the use of published indices as a proxy is the preferred method for estimating asset values. Mr. England based his opinion upon his reading of Actuarial Standard of Practice No. 44: Selection and Use of Asset Valuation Methods for Pension Valuations ("ASOP 44"), an actuarial standard of practice that was adopted by the Actuarial Standards Board in 2007 for use in valuations performed on or after March 15, 2008. See DX 192. ASOP 44 states, in relevant part:

Sometimes asset values as of the measurement date are not available. In these situations, the actuary should select an asset valuation method that adjusts the value of the assets for the time between the date as of which asset values are available, and the measurement date. Such an asset valuation method may reference appropriate published asset indices, or involve an adjustment using another reasonable method.

See DX 192 at § 3.2.4. Mr. England testified that based on his calculations, the difference in this regard would be \$506,131 for Richardson/Waco, \$24,704 for RTIS, and \$269,464 for the Salaried Plan. DX 161.0040.

Mr. England testified that using the proxy index approach required that he first make an assumption about the asset mix (the breakdown of assets between equities and fixed-income securities in the Raytheon master trust), and then select an index for each asset class. He testified that he assumed a “60/40 mix” of 60 percent equities and 40 percent fixed-income securities. He then explained that he selected a widely available index for each of the asset classes: the S&P 500 Index for the equities and the American Funds Bond Fund of America for the fixed-income assets. Tr. 1967 (England); DX 241.0062.⁸⁰ Mr. England testified that he used a 60/40 mix because it is widely used and was the assumption that the Pension Benefit Guaranty Corporation was using at the time of the segment closings in this case. Tr. 1902-03 (England). Mr. England testified that he felt the 60/40 mix was also appropriate because the actual asset allocation of the Raytheon Master Trust as of January 1, 2001 and 2002 was approximately 72/21 in 2001 and 68/26 in 2002. DX 144.0053; Tr. 1968-70 (England).

Mr. England conceded that there is nothing in the CAS or any other law that compels the use of proxy indices, but explained that in his view the use of proxy indices is the most reasonable method of estimating pension plan assets based on his understanding of ASOP 44. Mr. England testified that linear interpolation is appropriate

⁸⁰ The S&P 500 Index tracks large U.S. equities and Mr. England testified that it is used routinely as a proxy for the U.S. market. Id.

for functions in which the values are continuously increasing or decreasing between the known values, as opposed to functions in which values may rise or fall between two endpoints. Tr. 1900-01 (linear interpolation is appropriate only for “monotonically increasing or decreasing functions”), Tr. 1964-66 (linear interpolation only appropriate for curves that “approximate” linear curves, and asset value curve is “clearly not linear”). Mr. England viewed proxy indices as a preferred method of estimating the assets in the Raytheon pension plans’ portfolio, because ASOP 44 specifically mentions “appropriate published asset indices,” while linear interpolation is included as among the universe of “[o]ther reasonable method[s],” and because section 3.2.6 of ASOP 44 requires consideration of asset volatility in selecting an asset estimation method.⁸¹

In response to Mr. England’s criticisms, Mr. Vernon and Mr. Winer both testified that linear interpolation is a commonly accepted actuarial technique, see Tr. 1598, 1617 (Vernon); Tr. 691 (Winer). They further testified that using the interpolation method to estimate the market value of the assets was reasonable in this case. Tr. 691 (Winer); Tr. 1683-84 (Vernon). Mr. Vernon testified that he determined using linear interpolation was preferable to other asset estimation methods. Tr. 1683-86 (Vernon) (“[W]e used [linear interpolation] because it’s a simple approach. . . . [I]t doesn’t rely on making a number of assumptions which may or may not be correct. And it has no bias one way or the other

⁸¹ ASOP 44 § 3.2.6 provides, in relevant part:

the actuary should consider other known, relevant factors such as the following: . . . the characteristics of the asset classes in which the plan is invested (for example, the volatility of the return of each asset class and the correlation of the return with changes in the value of plan obligations.)

See DX 192 at § 3.2.6.

versus underestimating or overestimating what these assets are.”); see also PX 428.0047-.0050.

Additionally, Mr. Vernon criticized Mr. England’s use of a 60/40 mix of assets, explaining that the proxy indices selected and the percentage mix used by Mr. England did not coincide with the information known about the holdings of the plan. Mr. Vernon testified, in part, as follows:

First of all, that 60/40 mix doesn’t reflect what the Raytheon plan was in. We show evidence here that as of the beginning of 1999 the Raytheon plan was 20 percent invested in fixed income, not 40 percent. At the beginning of 2000 it was 14 percent invested in fixed income, not 40 percent. And so that 40 percent assumption is not reasonable.

If we . . . look at the actual indices he used. For the stock market or equities he used the S&P 500 for an index. That doesn’t reflect what the Raytheon plan was invested in. They had international stocks, whereas the S&P 500 is just U.S. stocks.

The Raytheon plan actually had Raytheon stock in it. It had some real estate in it. It had small cap and mid cap And so we believe it’s difficult to try and find an index that’s going to reflect what the Raytheon plan was invested in. And so if you pick different indices you’d have different results.

. . . . he could have used other indices, but even still it’s hard to find an index that’s going to match what the Raytheon plan was invested in. This is an example of what we’re saying is that we’d prefer to use a method that relies on as few assumptions as possible rather than making an assumption that isn’t appropriate.

Tr. 1683-86 (Vernon); see also PX 428.0047-.0050.

Mr. Vernon further testified that in his view the use of linear interpolation in this case complied with the requirements of ASOP 44. See Tr. 1733, 1837-38.⁸² Mr. Winer also testified that Mercer's calculation of the market value of the assets using linear interpolation followed ASOP 44. See Tr. 693 (Winer).

The CAS is silent on how pension plan assets should be estimated where the value of plan assets are unknown on the date of segment closing. The court is also not aware of any CASB guidance on the subject of whether proxy indices, linear interpolation, or any other asset estimation method should be favored to value assets as of the segment closing date. See Tr. 1884 (England) ("I don't think the CAS mandates any approach."); Tr. 1680 (Vernon) ("Now, CAS 413 does not have any provisions for specifying how assets are to be valued as of the segment closing date around this issue, so there's no guidance in CAS 413 on this."). In practice, each of the actuarial experts who testified agreed that both linear interpolation and proxy indices are, as a general matter, appropriate and reasonable methods for estimating assets. Tr. 1598, 1618, 1854-55 (Vernon); Tr. 1900 (England). Moreover, in his first expert report, Mr. England initially did not dispute Raytheon's use of linear interpolation. DX 146.0029. Mr. England then determined in his fourth expert report, based on his reading of ASOP 44, that the use of proxy indices would be more appropriate. See DX 161.0011 ("After closer review of Mr. Vernon's

⁸² In response to Mr. England's criticism that Mr. Vernon failed to follow ASOP No. 44 by failing to consider the volatility of the asset classes involved, Mr. Vernon testified that it was unnecessary to examine the volatility of the stocks in Raytheon's pension trust because he knew the appropriate indices were not available and also knew that volatility in the stocks is likely to be offset by the bonds. Tr. 1734-35 ("[I]t's a general principle with investing pension assets that you invest in stocks and bonds and the stocks, the volatility in the stocks is somewhat compensated by bonds, and so the overall volatility of a combined portfolio is less than the volatility in stocks by themselves.").

calculations we disagree with Mr. Vernon’s analysis for every plan. This disagreement is primarily due to Mr. Vernon’s method of estimating the assets as of the segment closing date by prorating the beginning and end of month values . . .”).

The court finds that the professional standard on which Mr. England relies, ASOP 44, permits rather than mandates the use of indices, allowing that an actuary “may” choose between more than one reasonable method of asset estimation. See DX 192 § 3.2.4 (“[A]n asset valuation method may reference appropriate published asset indices, or involve an adjustment using another reasonable method.”). Accordingly, the court does not read ASOP 44 to compel Raytheon to follow Mr. England’s preferred method under ASOP 44. The court further finds that linear interpolation was a reasonable method for Raytheon to utilize in estimating pension plan assets. Therefore, the court finds that Raytheon’s use of the linear interpolation is compliant with CAS 413-50(c)(12)(iii)’s requirement to utilize the market value of the assets “as of the date of the [AIS segment closing].”

c. Raytheon’s use of a one-hundred percent retirement assumption

Another major dispute over Raytheon’s segment closing adjustment concerns whether Raytheon impermissibly changed its actuarial assumptions with regard to the retirement of retirement-eligible plan participants in preparing its segment closing calculations for all of the plans in dispute in the AIS segment.⁸³ In computing the actuarial accrued liability for the segment, CAS 413-50(c)(12)(i) requires that “[t]he

⁸³ This is also an issue with respect to the Optical segment and the Nonbargaining plan in the alleged PWF segment.

actuarial assumptions employed shall be consistent with the current and prior long term assumptions used in the measurement of pension costs.” CAS 413-50(c)(12)(i). The same requirement applied under the original CAS 413. See Gen. Motors Corp., 78 Fed. Cl. at 342-43. The assumptions used in the measurement of pension costs are governed by CAS 412-40(b)(2), which states in relevant part: “Each actuarial assumption used to measure pension cost shall be separately identified and shall represent the contractor’s best estimates of anticipated experience under the plan, taking into account past experience and reasonable expectations.” CAS 412-40(b)(2). The CAS Board recognized in its comments to the 1995 amendments to CAS 412 and 413 that a contractor could, however, revise its actuarial assumptions “based on a persuasive actuarial experience study.” 60 Fed. Reg. 16,534, 16,539 (Mar. 30, 1995).

In its annual CAS 412 measurement of pension cost for all of Raytheon’s pension plans, Mercer made two assumptions relevant to the retirement of plan participants. Mercer first assumed probabilities of termination of plan participants at various ages. Tr. 775-76 (Winer). Based on participants’ assumed termination ages, Mercer then knew whether the person would be eligible under the plan to retire immediately at that age. If a participant was eligible to retire immediately at their assumed termination age, Mercer then assumed the participant would commence benefits immediately; otherwise, Mercer assumed the participant would defer the commencement of his or her benefits. Tr. 775 (Winer) (“[O]ur calculations assume that if somebody terminates over eligible for retirement, then you retire at that age. That’s the way the actuarial calculations work.”). Mr. Barry explained the process in his testimony as follows:

Q So you don't simply assume when you're doing a valuation that if people are eligible to retire that they do so?

A Not necessarily, we assume that if a person terminates when they are eligible to retire that they will retire.

THE COURT: Terminate meaning?

THE WITNESS: So in a valuation there's really three kinds of people. There's active people, terminated vested people, retired people. Retired people, we know what they're doing. Terminated and vested, we assume that they'll defer until age 65 to get their benefit. Active people, we have to make assumptions about what happens over time. Over time some of them will terminate, and eventually some of them will retire. So in a valuation we assume that when somebody reaches the eligibility for any sort of subsidized retirement we have a probability of retirement and then we assume that they will in fact retire in the valuation.

Tr. 896-97 (Barry).

In preparing the CAS 413 segment closing calculations for each of the plans in dispute, Mercer made one assumption relevant to the retirement of plan participants.

Mercer assumed that if a participant (previously active and now terminated from Raytheon by virtue of the sale) was eligible to retire on the segment closing date (the date of termination) based upon his or her actual age and years of service, then the participant would retire and take benefits immediately. For each participant who was not eligible to retire, Mercer assumed the participant would defer the commencement of his or her benefits. Tr. 829 (Winer); Tr. 1671-72, 1747-48 (Vernon). Mercer further assumed that everyone eligible to retire on the day of segment closing retired that day. Tr. 1744 (Vernon). If a plan participant was eligible for early retirement the assumption was the participant would retire that day. Id.

Mr. Winer provided the following example of how these two scenarios play out in practice:

A What we're saying is once somebody becomes a terminated employee, if they're eligible for retirement, we assume they take retirement. If they're not eligible, then they get a deferred benefit. That's the way the value – that's our assumption as well.

Q And in your chart, if that person at 65 had actually taken early retirement, would it still be under the 45 percent, or for that person, would you assume 100 percent?

A Well, 65 is normal retirement. But what we assume is if you reach 65 and you're active, 45 percent of those people will choose retirement.

Q And if their segment closed and they were all terminated –

A We'd assume they'd all take retirement.

Q And the option would be what, forego retirement?

A Yeah. It doesn't make sense if you're not accruing any more benefit and you're not working.

Tr. 828-29 (Winer).

Mr. England explained that Mercer's assumption that all active participants eligible to retire would do so on the segment closing date ("one-hundred percent retirement assumption"), was not valid under the CAS because Mercer did not use this assumption in the annual valuations. DX 161.0030. Mr. England challenged Raytheon's one-hundred percent retirement assumption because this retirement assumption was different from the one that Raytheon used for purposes of its ongoing CAS 412 valuations and because Raytheon had not provided any persuasive actuarial experience to justify the change. Mr. England observed that in its annual pension calculation Raytheon,

rather than assuming that all participants who left Raytheon with retirement eligibility would immediately retire, would normally assume that terminated-vested participants would not retire until they reached normal retirement age of sixty-five. Tr. 1909-10 (“[I]f you have somebody who is terminated with a vested benefit, you assume that they will retire at the normal retirement date you assume that they retire at age [sixty-five], and that is because the normal retirement date in all of these plans, I believe, is [sixty-five], but normally you would simply assume that all separated [] vesteds defer to age [sixty-five].”); see also Tr. 897, 901 (Barry). However, Mr. England noted that for purposes of calculating the liability for the segment-closing calculation, Mercer assumed that every terminated-vested participant would retire immediately, regardless of whether they had reached age sixty-five, so long as they were eligible at the time of the segment closing. See DX 241.0006, .0030; DX 161.0030-.0031; Tr. 1908-09 (England) (“Now, much has been said by Mr. Winer, and by Mr. Vernon, about the fact that actuarial valuation assumptions assume that people, when they terminate, if they are eligible to retire, will do so. And there is truth to that, in that part of an actuarial valuation is that you take all of your active participants as of the present, and you project in the future what you expect to have happen What happened here is that they changed the valuation date to the segment closing date, and at the segment closing date, they knew when people had terminated.”).

Mr. England testified that in his opinion the effect of the error would be to overstate each of the plan’s liabilities at segment closing, thereby unfairly increasing the segment pension deficit (or decreasing the segment pension surplus). He testified that in

his experience not all retirement eligible participants do retire when a business unit is sold; some employees eligible to retire would retire, while others would choose to defer retirement because they would still be employed by the segment's buyer and would want to avoid any reduction in retirement benefit for retiring early. Tr. 1914-15 (England).

Mr. England testified that he did not have the data necessary to calculate how changing this assumption would affect the segment closing adjustment. Tr. 1916. Mr. England testified that for the Greenville Hourly plan, one of the plans that the court determined was no longer in dispute, see supra note 63, the actual experience of plan participants demonstrated that the one-hundred percent retirement assumption could lead to an increase in plan liability at segment closing. Tr. 1912-13 (England). In the case of Greenville Hourly, Mr. England testified that plan liability increased by at least 11 percent. Id. In that plan, 362 participants were eligible for immediate retirement at the time of segment closing. DX 161.0032; Tr. 1913 (England). Mr. England testified that he could not know for certain how many retired in that plan in 2002, but the number of retirees in the plan increased by 227 during that year. Tr. 1913; see also DX 161.0032.

In response to Mr. England and in support of Mercer's calculations, Mr. Vernon reviewed Mercer's retirement assumption and stated that in his view Mercer's one-hundred percent retirement assumption was reasonable because the segment closing resulted in a change in the circumstances of the plan participants. Tr. 1671-73; Tr. 1748 (Vernon). Mr. Vernon testified that in his experience, when a government contractor sells a segment, most of the employees who are retirement-eligible do elect to begin collecting pension benefits, even if they accept employment from the successor

contractor. Tr. 1676 (Vernon). Mr. Vernon agreed that in preparing the actuarial valuation reports for the various pension plans of Raytheon in this period, Mercer never assumed that one-hundred percent of the retirement eligible participants would retire as soon as they became eligible. Tr. 1747 (Vernon). However, Mr. Vernon distinguished between active participants and participants that are no longer active at the time of the segment closing, because at that point they would no longer be working for Raytheon. Tr. 1748-49 (Vernon) (“We’re saying that we know the termination date, so this is not a change in assumption, retirement age assumption. It’s a change -- we know the termination date, so now they become inactive employees.”). Mr. Vernon testified that this difference in factual circumstances justified the difference between the assumption used in the segment closing calculation and the ongoing valuation assumptions. Tr. 1672 (Vernon). In Mr. Vernon’s view, the knowledge of the termination date, rather than prior assumptions about possible termination dates, should determine whether Raytheon should assume that a participant would defer benefit commencement or elect benefit commencement immediately at the time of segment closing. Tr. 1672 (Vernon). Mr. Vernon agreed with Mr. England that actual information regarding those participants who did retire at segment closing would produce a more accurate picture than a projection that one-hundred percent of those who were eligible to retire would retire on the day of segment closing. Tr. 1752-53 (Vernon). However, like Mr. England, Mr. Vernon never investigated the specific facts, Tr. 1752 (Vernon), and also like Mr. England, Mr. Vernon did not know whether Mercer’s reliance on the one-hundred percent retirement

assumption for the subject plan had any material impact on the segment's deficit. Tr. 1746 (Vernon).

The court again notes that Raytheon is required by CAS 413-50(c)(12)(i) to perform its segment closing adjustment with assumptions consistent with its on-going CAS 412 assumptions, unless the contractor revises its actuarial assumptions based on "persuasive actuarial experience." Here Raytheon asserts that actual data in the form of the age and eligibility of each plan participant on the date of segment closing together with expert actuarial opinion regarding retirement decisions justifies the "one-hundred percent retirement assumption" used for all terminated-pension eligible participants, regardless of whether they have reached age sixty-five. Raytheon contends that given these facts, its decision to change assumptions was reasonable and did not violate the provisions of the CAS.

The court agrees with Raytheon. Raytheon was able to support the change in its retirement assumption with evidence to show the number of pension eligible employees and with expert opinion to the effect that employees eligible to collect a retirement will ordinarily do so when a segment is closed. Without evidence to show that this change in assumption was factually incorrect or that correcting this assumption would make any material difference in the deficit owed to Raytheon, the court finds that Raytheon's retirement assumption in its AIS segment closing adjustment is supported and will not be set aside.

d. Raytheon's phase-in of plan benefits

At trial the court also heard testimony challenging Raytheon's segment closing adjustment for AIS on the grounds that Raytheon incorrectly phased-in recent benefit improvements under CAS 413-50(c)(12)(iv) ("Pension plan improvements adopted within 60 months of the date of the event which increase the actuarial accrued liability shall be recognized on a prorata basis using the number of months the date of adoption preceded the event date."). With respect to the phase-in of benefit improvements for the RTIS plan, Mr. England testified that Raytheon's calculations failed to comply with CAS 413-50(c)(12)(iv) because Raytheon prorated the benefits by years rather than by months. Tr. 1926-27 (England); DX 241.0065. Mr. England explained that this alleged mistake was slightly favorable to the government because it resulted in a reduction of plan liability in the segment closing adjustment calculation. Tr. 1927 (England) ("It is not a big error, and Mr. Vernon is correct that the error favors the government . . ."). Mr. England explained that the error amounted to a \$2,903 reduction in liability for the AIS segment. DX 161.0035-.0036. Mr. England also believed that Raytheon erred in prorating the amount of the increased liability from the time the benefit improvement was adopted in 1998, rather than at the time of the segment closing date in 2002. Id. Mr. England explained that this alleged mistake resulted in altering the AIS segment closing calculation for the RTIS plan by \$773. DX 161.0036. Tr. 1957 (England) ("about \$700").

Mr. Vernon testified that he agreed with Mr. England that there was an error in the phase-in of liabilities for the benefits improvements of the RTIS plan and that they should

have been prorated by months rather than years. Tr. 1611. Mr. Vernon also agreed that the error worked to the benefit of the government. Id. However, because the adjustment for the segment calculation was “insignificant” Mr. Vernon “[saw] no need to adjust our segment closing calculations.” PX 428.0052. In addition, with respect to Mr. England’s contention that Raytheon calculated the phase-in as of January 1, 1998, resulting in a \$773 error in Raytheon’s favor, Mr. Vernon testified that he believed Mr. England was mistaken in his assessment of the calculation made by Mercer:

There’s a second objection that Mr. England has where he’s saying that we or Mercer did the phase-in using present value of benefits as of January 1, 1998 instead of reflecting the value of the benefit as written as a segment closing date, and he’s just simply wrong in that regard. We did reflect the—we, Mercer—and Mercer reflected the value of the benefit improvement as of the se[gment] closing date.

Tr. 1611-12 (Vernon); Tr. 1688 (Vernon) (“We took the value of the benefit improvement as of the segment closing date, and that was what we applied the phase in to.”).

Based upon the evidence and testimony presented it is undisputed that there was an error in the phase-in of benefits by Raytheon and that error favored the government. Accordingly, the court finds that Raytheon’s AIS segment closing calculation must be corrected to reflect a \$2,903 increase in the RTIS plan deficit in order to comply with CAS 413-50(c)(12)(iv). The court further finds Mr. Vernon’s testimony persuasive that Mr. England was mistaken in his finding that Raytheon did not reflect the benefit improvement as of the segment closing date. Therefore, the court finds that Raytheon’s calculations do not require correction in the amount of \$773.

e. Raytheon's alleged use of out-of-date benefit payment data for the Salaried plan

Mr. England's final objection to Raytheon's calculation of AIS pension assets and liabilities related to his concern that Raytheon used outdated data as of the segment closing date in calculating the liabilities for the Salaried plan. At trial Mr. England testified that Raytheon's error resulted in "a small increase in the segment closing surplus" for the Salaried plan in the AIS segment. DX 241.0066. Mr. England testified that he understood that the government's share of the Salaried Plan deficit is zero. Tr. 2256 (England). Therefore, correcting for this error would have no effect on the monetary claim in this case. Because this error does not have any impact on the segment closing amounts owed by the government to Raytheon for the AIS segment closing, there is no reason to address the issue.

4. Raytheon's government share calculations comply with CAS 413

The court now turns to its findings and conclusions regarding the government share calculations. The government's share of the "adjustment amount" must be determined in accordance with CAS 413-50(c)(12)(vi), which states:

The Government's share of the adjustment amount determined for a segment shall be the product of the adjustment amount and a fraction. The adjustment amount shall be reduced for any excise tax imposed upon assets withdrawn from the funding agency of a qualified pension plan. The numerator of such fraction shall be the sum of the pension plan costs allocated to all contracts and subcontracts (including Foreign Military Sales) subject to this Standard during a period of years representative of the Government's participation in the pension plan. The denominator of such fraction shall be the total pension costs assigned to cost accounting periods during those same years. This amount shall represent an adjustment of contract prices or cost allowance as appropriate. The adjustment may be

recognized by modifying a single contract, several but not all contracts, or all contracts, or by use of any other suitable technique.

Id.

It is undisputed that the government participation percentage for the Raytheon Salaried plan is zero. See supra note 64. For each of the other four plans in the AIS segment, Raytheon submitted a calculation of the government's share of the segment closing adjustment amount using sales as a proxy for pension costs allocated to CAS-covered contracts and subcontracts. See Tr. 48, 241-42 (Murphy); PX 19. As discussed above, Raytheon utilized this same method to determine the government's share in connection with the segment closings that resulted in a pension surplus, and paid the government amounts based on this methodology. Despite settling surplus segments on the basis of sales data, the government contracting officer denied Raytheon's certified claim for the government's participation in the AIS CAS 413-50(c)(12) segment closing adjustment. PX 20. He noted that a possible basis for denying Raytheon's claim was that "the Government sees nothing in CAS 413-60(c)(9) that allows the use of CAS-covered sales as a proxy for pension plan costs in determining the amount of the Government's share." Id.

At trial, the government presented testimony to show that Raytheon failed to comply with CAS 413 by utilizing sales data rather than actual pension cost data when it prepared its government share calculation. The government also presented evidence to show that Raytheon had failed to account for the segment's pension deficit attributable to pension costs allocated to firm-fixed-price contracts prior to the 1995 CAS amendments

or for the portion of the deficit attributable to pre-CAS contracts. The government contends, as a matter of law, that Raytheon must provide it with an equitable adjustment to account for the portion of the deficit attributable to pre-1995 CAS fixed price contracts and for the portion of the deficit attributable to pre-CAS contracts. The court will address these contentions in turn.

a. Raytheon's use of sales data versus general and administrative ("G&A") percentages

Raytheon prepared its government share calculation by following the example provided in CAS 413-60(c)(9). Tr. 48, 241-42 (Murphy). CAS 413-60(c)(9) provides the following illustration:

Contractor L operated a segment over the last five years during which 80% of its work was performed under Government CAS-covered contracts. The Government work was equally divided each year between fixed-price and cost-type contracts. . . . As defined by 9904.413-30(a)(20)(i), a segment closing occurs when Contractor L sells the segment at the end of the fifth year. . . . The difference between the market value of the assets and the actuarial accrued liability for the segment is \$1.3 million (\$6.3 million-\$5 million). Pursuant to 9904.413-50(c)(12)(vi), the adjustment due the Government for its 80% share of previously-determined pension costs for CAS-covered contracts is \$1.04 million (80% times \$1.3 million). Because contractor L has no other Government contracts the \$1.04 million is a credit due to the Government.

CAS 413-60(c)(9). Raytheon obtained the data for its government share calculation from the DCAA and records maintained by the segment. Raytheon witnesses testified that they did not use actual pension costs contributed by the government to calculate the government's share because Raytheon did not have the historical records needed to determine the amount of pension costs allocated to CAS-covered contracts and subcontracts. Tr. 46-48, 176-77 (Murphy). Where pension cost data were not available,

Raytheon's witnesses testified that sales data can serve as a valid proxy for determining the government's share.

Raytheon presented evidence at trial to support the calculation of the government's share it submitted in its CDA claim. PX 428 at 23, 53. The evidence presented for the Greenville Salaried and Hourly plans showed that the government's share is approximately 78 percent, which gives rise to a \$56,340,826.21 deficit share. Id. For the RTIS plan, the evidence showed that the government's share is approximately 84 percent, which gives rise to a \$69,101.02 deficit share. Id. For the Richardson/Waco plan, the evidence showed that the government's share is approximately 77 percent, which gives rise to a \$135,555.84 surplus share, set-off against the deficit plans in the segment. Id. Raytheon claims that the total government's share of the pension deficit attributable to the AIS segment is \$56,274,371.39. Id.

At trial, the government took issue with Raytheon's use of sales percentages as a proxy for pension cost contributions in determining the government's share of the AIS pension deficit. The government presented the testimony of Ms. Lynn Robbins, an auditor with the DCAA. She testified that she had undertaken an investigation of Raytheon's government share calculation using the criteria established in the DCMA/DCAA Joint Guidance. Tr. 1430. In her investigation, Ms. Robbins testified that she used G&A percentages (the general and administrative pool of expenses), where available, as a proxy to calculate the government's share based on her assumption that pension costs "go through G&A." Tr. 1539-42, 1547. Ms. Robbins explained that she understood that Raytheon allocated pension costs through a fringe benefit rate, but that

the fringe benefit allocation eventually went through the G&A allocation base. Tr. 1539. Based on her investigation, the government determined that Raytheon had allocated more of the deficit to the government using its sales approach than would be allocated using the G&A approach, resulting in a total government share of the AIS pension deficit of \$47,245,055. See supra Part III.A.1; Tr. 1445-92 (Robbins); DX 111; DX 112; DX 130; DX 178; DX 178A.

In response to Ms. Robbins's testimony regarding the use of G&A percentages to calculate the government's share of pension costs, Raytheon presented the testimony of Mr. John Panetta, Raytheon's Director of Government Accounting. He stated based upon his experience at Raytheon that Raytheon did not allocate pension costs through the G&A rate. Tr. 2311 (Panetta). He explained, using the CAS Disclosure Statement for the former E-Systems sites at Greenville and Waco as an example, PX 358, that pension costs at Raytheon are allocated through the fringe benefit rate, not through the G&A rate. Tr. 2313-18 (Panetta). Mr. Panetta testified on cross-examination that he had not done any calculations using the "fringe rate" and did not know whether using the "fringe rate" would make a difference in Ms. Robbins's calculations. Tr. 2340.

In reviewing Raytheon's CAS 413 government share calculations, as when reviewing Raytheon's CAS 413 segment closing adjustment calculations, the court reviews Raytheon's calculations for compliance with the CAS and for reasonableness where the CAS and the CAS Board are silent. As with the other calculations mandated by the CAS, where perfect information is lacking, use of reasonable estimates and

assumptions may be allowed.⁸⁴ See CAS 413-60(c)(9). It is the government's burden to demonstrate the unreasonableness of Raytheon's calculations. See supra Part III.A.2.

The court finds, given the absence of pension cost data for CAS-covered contracts, that Raytheon reasonably relied upon sales data as a proxy for pension costs to produce its government share calculations pursuant to CAS 413-50(c)(vi). The illustration set forth in CAS 413-60(c)(9), contrary to the government's contentions, plainly endorses the use of sales data to determine the government's share. The illustration identifies the government's share based on the percentage of government work performed, stating, "80% of its work was performed under Government CAS-covered contracts. . . . Pursuant to 9904.413-50(c)(12)(vi), the adjustment due the Government for its 80% of previously-determined pension costs for CAS-covered contracts is . . . 80% times [the segment closing adjustment amount]." CAS 413-60(c)(9). In contrast to Raytheon's approach, which is identified in the CAS 413-60(c)(9) illustration, the approach used by Ms. Robbins is based on a simple application of G&A rates as a proxy for the government's share and is not supported by any express reference in the CAS. In addition, the approach used by Ms. Robbins is different from the approach the government previously accepted when it settled the surplus segment closings with Raytheon.⁸⁵ Tr. 48 (Murphy).

⁸⁴ For example, even the DCMA/DCAA Joint Guidance notes that the historical data necessary to trace a segment closing surplus or deficit to specific pension costs "in most, if not all cases is not available," necessitating the use of estimates and assumptions. DX 114.0003.

⁸⁵ Additionally, in the Teledyne case, the government computed its share of the Teledyne Electronic Systems ("TES") segment closing adjustment using the TES sales mix over a representative period of years. See Teledyne, 50 Fed. Cl. at 158 ("On August 21, 1996, the [contracting officer ("CO")] issued a final decision, asserting a government claim against Teledyne for \$2,883,165 plus interest from the date of the sale of TES. The CO computed the

Indeed, Ms. Robbins agreed that when other information is not available sales data may be used as a surrogate for cost data, and that the government has relied upon sales data where cost data were not available. Tr. 1547 (Robbins).

As discussed previously, Raytheon obtained the historical sales mix data from records maintained by the DCAA and the AIS segment. See Tr. 64, 85, 93-95, 102-03, 111, 117, 177 (Murphy). The evidence established that Raytheon used sales data as a proxy for cost data because it did not have the historical records needed to determine the amount of pension costs allocated to CAS-covered contracts and subcontracts. Tr. 46-48, 177 (Murphy). The evidence further established that Raytheon made all reasonable efforts to obtain the information from the purchaser of the segment and the DCAA.

In these circumstances, Raytheon reasonably followed the advice provided in CAS illustration 413-60(c)(9) to determine the government's share. Put another way, the court finds that it was reasonable for Raytheon to utilize sales data as a proxy for pension cost data when performing its CAS 413 government share calculations, where a reasonable search for historical data was performed, and actual pension cost data could not be located. The court further finds that the government's reliance on the investigation by Ms. Robbins is misplaced. The investigation relied on assumptions that were not correct and therefore does not provide any basis for second-guessing Raytheon's government share calculation.

amount of the government claim by multiplying the amount of the TES pension surplus by TES's percentage of CAS-covered contracts, including both flexibly-priced and firm-fixed-price contracts, during the period of years the CO deemed to be representative of the government's participation in the TES pension plans.”).

b. The court lacks jurisdiction over the government's equitable adjustment claim

The government contends that Raytheon's government share calculation must be recalculated because Raytheon failed in its segment closing adjustment to account for pension costs that were paid before the segment closing provisions were added to the CAS in 1978 and for pension costs that were paid in connection with fixed price contracts between 1978 and 1995, before the CAS was amended in 1995. The government argues that it is entitled to an equitable adjustment removing these amounts from any amounts owed to Raytheon in connection with the AIS segment closing.

The court in Teledyne concluded, "the portion of the CAS 413 segment closing adjustment that is attributable to government contributions under firm-fixed-price contracts is not recoverable absent an express contract provision providing for that recovery." Teledyne, 50 Fed. Cl. at 178, aff'd, Allegheny Teledyne. The court also held that the portion of the surplus or deficit that was attributable to pre-CAS 413 contracts "must be excluded from the portion of the CAS 413 segment closing adjustment that is subject to recovery" Id. at 183. The Federal Circuit affirmed. Allegheny Teledyne, 316 F.3d at 1375-80 (exclusion of firm-fixed-price contracts), 1383-84 (exclusion of pre-CAS 413 contracts). In Viacom, the court also held that the government is entitled to an equitable adjustment to the extent that application of the 1995 CAS 413 amendments results in the government owing more under the amended CAS than it would have owed under the original CAS. 70 Fed. Cl. at 663.

Based upon the clear line of precedent in this court and in the Federal Circuit, the court ruled in Raytheon II that the government is entitled to an equitable adjustment of any part of a segment's deficit that is attributable to pension costs allocated to firm-fixed-price contracts that were subject to the original CAS 413. Raytheon II, 96 Fed. Cl. at 554-55.

The government presented evidence at trial, through the testimony of Ms. Robbins, to show that Raytheon had prepared its segment closing adjustment without removing from the government share the portion of the Raytheon deficit attributable to the amounts subject to an equitable adjustment. Ms. Robbins testified that under the DCMA/DCAA Joint Guidance, the equitable adjustment should be included as part of the CAS 413 government share calculation.⁸⁶

Raytheon does not dispute that it did not incorporate the government's claimed equitable adjustment in its segment closing adjustment. It argues, however, that as a matter of law the equitable adjustment is not part of the segment closing adjustment, but is instead a contract change subject to the claim requirements of the CDA. Under FAR 52.230-2, a contractor or the government is entitled to "an equitable adjustment . . . if the

⁸⁶ The Joint Guidance incorporates the equitable adjustment into the government share calculation as follows: first, the portion of the deficit is allocated between the periods before and after the 1995 amendments to CAS 413; second, the government's share must be separately calculated for each period; and, third, the government's CAS 413 obligation (in dollars) must be separately calculated for each period (equal to the deficit allocable to the period times the government's share calculated for the period). See DX 114.0003. The Joint Guidance attempts to compress these "three steps into a mathematically equivalent one-step calculation." Id. Additionally, if the contractor performed contracts before CAS 413 became effective, the Joint Guidance provides that a portion of the surplus or deficit attributable to contributions allocated to pre-CAS 413 contracts must also be excluded from the calculation "by adjusting the denominator of the fraction used to calculate the government's share." Id. at .0005.

Contractor is required to make [a change] to the Contractor's established accounting practices." Because including pre-CAS contracts and fixed price contracts before 1995 in the segment closing mix represents a change from past contract accounting practice, an equitable adjustment is available to either the contractor or the government to the extent the amended CAS 413 results in the government or contractor owing more under the amended CAS than it would have owed under the original CAS. See Viacom, 70 Fed. Cl. at 663; Raytheon II, 96 Fed. Cl. at 554. Raytheon argues that the equitable adjustment must take the form of a CDA claim because the equitable adjustment under FAR 52.230-2 is distinct from the segment closing adjustment required under CAS 413-50(c)(12). As this court stated in Viacom:

The court notes that the equitable adjustment that is triggered under 48 C.F.R. § 52.230-2(a)(4)(i) when there is a government-mandated accounting change is different from the adjustment that takes place in a CAS 413 segment closing. The equitable adjustment under 48 C.F.R. § 52.230-2(a)(4)(i) is triggered by the adjustment that takes place in a CAS 413 segment closing to the extent that the CAS 413 adjustment involves contracts that pre-date the revised CAS 413 and that would not otherwise have been involved under the original CAS 413. On the other hand, the adjustment that takes place in a CAS 413 segment closing is defined by the terms of revised CAS 413.

70 Fed. Cl. at 662 n.17.

Given the nature of the government's claim, Raytheon next argues that the government is not entitled to an equitable adjustment in this case because it failed to make a claim against Raytheon or receive a decision from the contracting officer and thus failed to comply with the requirements of the CDA. In such circumstances, Raytheon argues, this court lacks jurisdiction to award the equitable adjustment to the

government.⁸⁷ Specifically, Raytheon argues that because a prerequisite to an equitable adjustment under the CAS clause at FAR 52.230-2 is a government CDA claim, and because the government never issued a contracting officer's final decision asserting an equitable adjustment, the court lacks jurisdiction to award the government an equitable adjustment.

The court agrees with Raytheon and therefore, despite its earlier ruling, must conclude that it does not have jurisdiction over the government's equitable adjustment claim. First, as explained in Viacom, an equitable adjustment is distinct from a segment closing adjustment and, contrary to the government's contentions, does not have a place in the segment closing adjustment calculation. Second, because the equitable adjustment is a matter of contract, compliance with the regulations governing contract claims is essential. A government claim for an equitable adjustment under FAR 52.230-2 is subject to the CDA. See Applied Cos. v. United States, 144 F.3d 1470, 1477-78 (Fed. Cir. 1998) (The comprehensive procedures of the [CDA] govern the resolution of contract disputes that arise between the government and contractors."); Cecile Indus., Inc. v. Cheney, 995 F.2d 1052, 1055 (Fed. Cir. 1993) ("The CDA exclusively governs Government contracts and Government contract disputes."). Under the CDA, "[a]ll claims by the government against a contractor relating to a contract shall be the subject of

⁸⁷ In this connection, Raytheon argues that it does not matter that the government in its answer to the plaintiff's amended complaint, ECF No. 66, raised as a defense its entitlement to an equitable adjustment under FAR 52.230-3 "to the extent that it would be required to pay a greater amount of segment-closing adjustment with respect to any such portion under Revised CAS 413 than it would under Original CAS 413." Raytheon contends that the government needed a final written decision from the contracting officer to assert such a claim.

a decision by the contracting officer.” 41 U.S.C. § 605(a);⁸⁸ see also Joseph Morton Co. v. United States, 757 F.2d 1273, 1279 (Fed. Cir. 1985) (“[I]f the CDA applies, the Government’s counterclaims against [the contractor] must be subject to a decision by a [contracting officer] before the Government can assert them in the Claims Court”). Accordingly, the court finds that because the government failed to obtain a final decision by the contracting officer with regard to its equitable adjustment claim, this court does not have jurisdiction over that claim.⁸⁹ Thus, no alteration of Raytheon’s AIS segment closing adjustment is required to address the government’s claim for an equitable adjustment.

5. The government’s share of the AIS segment closing adjustment pension deficit is \$56,276,815.61

For the foregoing reasons, based on its findings of fact and conclusions of law, the court holds that Raytheon’s AIS segment closing adjustment (altered to reflect a \$2,903 increase in the RTIS plan deficit, see supra Part III.A.3.d.) is as follows:

⁸⁸ This provision of the CDA is currently codified at 41 U.S.C. § 7103(a)(3) (“Each claim by the Federal Government against a contractor relating to a contract shall be the subject of a written decision by the contracting officer.”).

⁸⁹ The government’s defense regarding the equitable adjustment is not sufficient to establish jurisdiction; the government’s claim for an equitable adjustment must therefore be dismissed. See M. Maropakis Carpentry, Inc. v. United States, 609 F.3d 1323, 1331 (Fed. Cir. 2010) (holding that the jurisdictional requirements of the CDA apply even when a claim is asserted as a defense); see also Joseph Morton Co., 757 F.2d at 1279-81.

	A. Government Participation Numerator	B. Government Participation Denominator	C. Government Share Percentage (A/B)	D. Surplus/ (Deficit) Amount	Total Government Share Surplus/ (Deficit) (C x D)
Greenville Salaried/ Hourly	\$135,828,017.00	\$172,249,066.00	78.8555898469%	(\$71,448,107.00)	(\$56,340,826.21)
Richardson/ Waco	\$8,546,760.00	\$11,125,883.00	76.8187118272%	\$176,462.00	\$135,555.84
RTIS	\$64,961,674.00	\$77,154,720.00	84.1966298368%	(\$84,974.00) ⁹⁰	(\$71,545.24)
Raytheon Salaried	N/A	N/A	0.000%	\$3,097,023	\$0.00
AIS – Total					(\$56,276,815.61)

B. Optical segment closing calculations

1. Optical findings of fact

Raytheon sold its Optical segment on March 1, 2001 to B.F. Goodrich. PX 78.0002. As discussed above, by the terms of the asset purchase agreement between Raytheon and B.F. Goodrich, Raytheon retained the pension plan assets and actuarial accrued liabilities for Optical. PX 230.0048. There is no dispute that under CAS 413-30(a)(20) the March 1, 2001 sale resulted in a “segment closing” requiring Raytheon to perform CAS 413-50(c)(12) segment closing calculations for the Optical segment’s defined benefit pension plan. The Raytheon Nonbargaining Retirement Plan for former Hughes Aircraft employees (“Nonbargaining plan”) was the only Raytheon defined benefit pension plan covering Optical segment employees. In accordance with the CAS 413-50(c)(12) segment closing provision, Raytheon prepared a segment closing calculation to determine the difference between the market value of the pension assets

⁹⁰ This figure reflects a \$2,903 increase in the RTIS plan pension deficit attributable to the AIS segment from the \$82,071 deficit originally calculated by Raytheon. See supra Parts III.A.1., III.A.3.d.

and the actuarial accrued pension liability for the Optical segment. The Nonbargaining plan covers employees in many different Raytheon segments and was historically accounted for on a composite basis under CAS 413-40(c) and 413-50(c)(1). Tr. 782 (Winer). As a result, Raytheon needed to allocate plan assets to the Optical segment under CAS 413-50(c)(5) as required by CAS 413-50(c)(12)(ii). In addition, under CAS 413-50(c)(12)(vi) Raytheon was charged with calculating the government's share of any surplus or deficit amount determined for the Optical segment.

The basic facts of the origin and history of the Optical segment and Nonbargaining plan were not disputed at trial. Optical was established as a segment in 1990, when Hughes Aircraft Company ("Hughes") acquired the Electro-Optics Technology Division of the PerkinElmer Corporation. PX 16.0542; Tr. 679 (Winer). When the segment was established by Hughes, its participants were covered by the Hughes Nonbargaining Retirement Plan ("Hughes Nonbargaining plan"). Id.

Prior to November 30, 1991, the Hughes Nonbargaining plan required employee contributions, in addition to employer contributions, in return for a more generous benefit package. PX 16.0541-42; Tr. 1624-25 (Vernon). In 1991, the pension benefit formula was changed to make the plan funded through employer contributions only (called a "noncontributory" plan) for employees hired on or after December 1, 1991. These post-1991 employees were entitled to a less generous benefit than those who had been making contributions. PX 16.0542; Tr. 679-81 (Winer). When Hughes acquired PerkinElmer, the PerkinElmer employees were also covered under the Hughes Nonbargaining plan as noncontributory participants. Tr. 679-81 (Winer). After the entire Hughes

Nonbargaining plan became noncontributory, contributory participants were allowed to continue to make contributions as before and receive benefits under the more generous contributory formula, or they were given the option to stop contributing and receive benefits under the noncontributory formula. Tr. 679-80 (Winer).

On December 17, 1997, Raytheon and Hughes merged. PX 134.0048; Tr. 1087 (Harris); Tr. 1625 (Vernon). The Raytheon Nonbargaining plan at issue was established using the assets and liabilities from the Hughes Nonbargaining plan that Raytheon acquired as part of the merger. DX 8.0005; PX 134.0048; Tr. 1625-26 (Vernon). According to Mercer, as of December 1, 1999, there were a total of 582 active participants in the Optical segment, 19 contributory participants and 563 noncontributory participants. DX 29.0002. From the time the segment was created until the date of segment closing, the only known employer contribution (by Hughes or Raytheon) made to the Nonbargaining plan was made by Hughes in the plan year beginning December 1, 1991. In that plan year, Hughes paid a total of \$55,172,000 to the Hughes Nonbargaining plan (“the \$55,172,000 contribution”). The Nonbargaining plan was fully- or over-funded at that time and remained fully- or over-funded at the time of segment closing. Tr. 1627 (Nonbargaining plan was “fully funded”), 1628 (“over-funded”), 1633 (“fully-funded”); PX 18.0011 (“over[-]funded”).⁹¹ As a consequence, Raytheon never made any payments into the Raytheon Nonbargaining plan. Tr. 1628 (Vernon) (“[D]uring that

⁹¹ In his July 2010 expert report, Mr. Vernon explained that because the Nonbargaining plan was overfunded, he initially treated the \$55,172,000 contribution as a prepayment credit in his earlier reports. Id.

period that Raytheon owned it up until the segment closing date, [Raytheon] did not make any contributions because the plan was over-funded.”).

On March 1, 2001, Raytheon sold Optical to B.F. Goodrich. PX 78.0002. On April 18, 2001, the DCMA and the DCAA cited Raytheon for initial CAS 413 noncompliance for its failure to prepare a segment closing calculation for Optical. PX 257.0003; Tr. 39 (Murphy).

On October 9, 2001, Raytheon submitted its segment closing calculations for the Optical segment to the government. PX 78. The calculations prepared by Mercer included both a “recommended” adjustment and an “alternative” adjustment. The “recommended” adjustment identified a pension deficit. The “alternative” adjustment identified a pension surplus. The “recommended” calculations showed a segment closing adjustment with a pension deficit for the Optical segment in the amount of \$9,558,952. Mercer’s “alternative” calculation showed a segment closing adjustment with a pension surplus of \$11,438,570. PX 78.0004-.0005. Mercer candidly recognized in its submission to the government that the significant difference in outcomes turned on how CAS 413-50(c)(5) was applied. In Mercer’s words at the time, “[y]ou can see that there is quite a difference between the two methods.” PX 78.0005. The differences were not attributable to any employee contributions. Mercer did not include employee contributions in its calculations. Tr. 810-11, 813 (Winer); see also PX 78.0003 (Mercer calculated that on March 1, 2001 “the employer provided portion of the Market Value of Plan Assets . . . is \$3,315,927,558.”). Rather, Mr. Winer of Mercer explained that the

difference in the calculations was attributable to the different methodologies identified in CAS 413-50(c)(5)(i) and (ii).⁹²

More specifically, the primary reason for the difference between Mercer's two calculations stemmed from Mercer's treatment of the noncontributory participants in its (c)(5)(i) calculation as compared to its (c)(5)(ii) calculation. PX 78.0003. In the "recommended" calculation, Mercer divided the Optical segment into three employee groups and separately calculated the pension plan assets allocable to each group: (1) legacy contributory participants; (2) PerkinElmer noncontributory participants who joined the plan on January 1, 1990; and (3) other noncontributory participants who joined the plan after January 1, 1991. PX 78.0002-.0004; Tr. 278 (Garvey).

⁹² CAS 413-50(c)(5) states, in relevant part, as follows:

[T]here shall be an initial allocation of a share in the undivided market value of the assets of the pension plan to th[e] segment, as follows:

(i) If the necessary data are readily determinable, the funding agency balance to be allocated to the segment shall be the amount contributed by, or on behalf of, the segment, increased by income received on such assets, and decreased by benefits and expenses paid from such assets. Likewise, the accumulated value of permitted unfunded accruals to be allocated to the segment shall be the amount of permitted unfunded accruals assigned to the segment, increased by interest imputed to such assets, and decreased by benefits paid from sources other than the funding agency; or

(ii) If the data specified in paragraph (c)(5)(i) of this subsection are not readily determinable for certain prior periods, the market value of the assets of the pension plan shall be allocated to the segment as of the earliest date such data are available. Such allocation shall be based on the ratio of the actuarial accrued liability of the segment to the plan as a whole, determined in a manner consistent with the immediate gain actuarial cost method or methods used to compute pension cost. Such assets shall be brought forward as described in paragraph (c)(7) of this subsection.

Id. (emphasis added).

Mercer determined the pension assets attributable to the contributory plan participants by applying the ratio of pension liabilities attributable to the contributory plan participants who had last worked at the Optical segment compared to all of the contributory participants in the Nonbargaining plan.⁹³ This is the method identified in (c)(5)(ii). However, with regard to the noncontributory plan participants (those participants that joined the plan after 1990), Mercer stated that it used the approach set forth in (c)(5)(i). Tr. 809, 811 (Winer). Mercer based its calculation for the noncontributory participants on the assumption that the Hughes' contribution made to the Nonbargaining plan was for the benefit of the noncontributory participants only, and relying on that assumption, Mercer determined the percentage of the \$55,172,000 contribution that could be attributed to the Optical segment. PX 78.0003.

By separating out the contributory and noncontributory groups in the calculation, Mercer allocated none of the pension asset surplus that existed before the plan became noncontributory (prior to 1990, when both employees and the employer contributed to the plan) for the pensions of the post-1990 noncontributory group. The \$55,172,000 contribution alone would not be enough to pay the pensions for the noncontributory

⁹³ In describing its calculations in its submission, Mercer mistakenly referenced CAS 413-50(c)(5)(i), but quoted (c)(5)(ii). In addition, Mr. Winer, who prepared Mercer's calculations, testified that in fact he used (c)(5)(ii) for the contributory participants. Tr. 809, 811 (Winer). This comports with Mercer's statement in its submission that "the portion of plan assets attributable to a given segment (if those assets are not readily determinable for prior periods), is equal to the ratio of the Accrued Liability for the segment over the Accrued Liability for the entire plan . . . multiplied by the Market Value of Assets," see PX 78.0003. This describes the CAS 413-50(c)(5)(ii) method.

employees in the Nonbargaining plan, and it was for this reason that the “recommended” calculation gave rise to a pension deficit attributable to this group.

Mercer’s “alternative” calculation, which gave rise to a pension surplus, was based on Mercer’s use of the CAS 413-50(c)(5)(ii) method for determining pension assets allocable to the Optical segment. Under the “alternative” calculation, Mercer treated the Optical segment as a single segment, treated the \$55,172,000 contribution as a contribution to the Nonbargaining plan as a whole (as opposed to a contribution for the non-contributory participants only), and did not separate out the contributory and noncontributory plan participants from each other. In other words, the entire segment and was treated as single unit. Under this method, the Nonbargaining plan surplus was applied across the board to both the contributory and noncontributory plan participants. See PX 78.0004-.0005; Tr. 811 (Winer). As a result, the calculation showed a pension surplus in the segment closing adjustment.

As with its AIS segment closing adjustment, Raytheon did not include a government share calculation in its initial government submission. See generally PX 78. Raytheon then worked with the buyer (B.F. Goodrich) and the DCAA to prepare “a reasonable determination of the government participation.” Tr. 282-84 (Garvey); Tr. 374-75 (Cann); PX 79. On March 7, 2002, Raytheon submitted a revised segment closing calculation to the DCMA, which included a calculation attributing 85.6 percent of the segment closing adjustment to the government based on the information Raytheon received from B.F. Goodrich. PX 83; Tr. 283-84 (Garvey); Tr. 624 (Sheley). As with all of Raytheon’s government share calculations, its calculation of the government’s share

for the Optical segment used sales data as a proxy for pension cost data. Tr. 624 (Sheley).

The Optical segment closing adjustment was reviewed by the DCMA CIPR Center and the DCAA. See PX 371; PX 372; Tr. 1178-79 (Dowd); PX 79. The DCMA CIPR Center reviewed Raytheon's segment closing adjustment calculation and the DCAA reviewed Raytheon's government share calculation.

On June 18, 2002, the DCMA CIPR Center issued its report on the Optical segment closing adjustment calculation. PX 108. The CIPR Center report noted that the Raytheon proposal had two methodologies for calculating the CAS 413 adjustment amount. Id. at .0002. However, the report did not describe in any detail Mercer's alternative calculation or the pension surplus calculated by Mercer using the (c)(5)(ii) calculation. Id. The CIPR Center report recommended that the contracting officer "[a]ccept [Raytheon's] CAS 413 adjustment amount of [a deficit of] \$9,558,952 as reasonable" and approved Raytheon's recommended methodology and actuarial assumptions, stating:

1 METHODOLOGY

Raytheon used a methodology whereby three distinct groups were created from contributory, noncontributory and former Perkin Elmer employees. The asset allocation method, which recognizes employer contributions, is acceptable. However, there was no actual share ratio presentation or proposal. DCAA will need to determine the appropriate share ratio. The 80% used in the Mercer calculations were for illustrative purposes only.

2 ASSUMPTIONS

Assumptions are consistent with current Actuarial valuations. The 8% per year is considered a reasonable long-term estimate of annual return on assets.

3 SHARE PERCENTAGE

DCAA would need to determine or verify the correct share percentage[.]

Id.

In an August 14, 2002 audit report, the DCAA did not “take exception” to Raytheon’s government share calculation for the Optical segment of 85.6 percent. PX 269; PX 110.0002. Nor did the DCAA take exception to the Optical segment closing adjustment deficit amount for pension costs in the amount of \$9,558,952. Id.⁹⁴ Applying the government participation percentage against the pension deficit amount, the DCAA “determined the Government’s share of the pension adjustment to be (\$8,181,787).” Id. Though the DCMA, the DCAA, and Raytheon initially agreed on the Optical segment closing adjustment calculation, they did not settle the adjustment because “[t]he parties still had a concern with the outcome of the Teledyne decision, so this was just put on hold for the moment waiting for that decision.” Tr. 125-26 (Murphy).

During the following year, the government contracting officers and Raytheon discussed settling Raytheon’s Optical CAS 413 claim by partially offsetting the Optical segment deficit amount against surpluses Raytheon owed the government in connection with the “surplus” segment closings. PX 269; PX 331; PX 332; PX 389.0004; PX 393.0003; Tr. 1190, 1201 (Dowd); Tr. 1344-45, 1353-54 (McGrath); Tr. 127 (Murphy).

On August 11, 2003, following the Federal Circuit’s ruling in Allegheny Teledyne, Raytheon submitted a revised calculation of the government’s share for the Optical segment closing based on additional information received from B.F. Goodrich.

⁹⁴ The DCAA did, however, “take exception” to Raytheon’s PRB calculation, see PX 110.0002, which, as discussed previously, was the subject of the court’s decision in Raytheon I.

PX 314. In this calculation, Raytheon stated that it excluded firm-fixed-price contracts, see id. at .0002, “understanding that that was one way to look at the government’s share calculation,” in “an attempt to come to a negotiating position with the government because at the time [they] were in a state of working together to try to settle out the surpluses and deficits,” Tr. 468-69 (Tully). Raytheon utilized sales data from the years 1990 through 1994, broken down by cost-type and fixed-type contracts, to determine the government’s participation percentage in cost-type contracts of 63.90 percent. PX 314. This, Raytheon asserted, would result in the government owing \$6,107,666 of the segment closing adjustment pension deficit calculated by Mercer. PX 314. Following Raytheon’s revised submission, the parties engaged in another year of review and discussions. See PX 334; PX 408.0003; PX 410.0003; PX 412.0004.

As previously stated, in July 2004, the DCMA and the DCAA issued the DCMA/DCAA Joint Guidance for implementing the Federal Circuit’s ruling in Allegheny Teledyne. See supra note 21. In August 2004, the government issued letters to Raytheon seeking payment on two surplus segments, RE&C and Montek, and on September 21, 2004, Raytheon issued payment to the government to settle the surplus segment closures. See supra note 59. On September 30, 2004, the contracting officer denied Raytheon’s request for the government to fund its share of the Optical CAS 413 segment closing deficit. PX 298. The reason cited by the contracting officer for disallowing the pension costs was a failure on the part of Raytheon to fund the Optical pension costs by the federal tax deadline for the year of the segment closing. Id.

By letter dated November 8, 2004, Raytheon submitted a certified claim for the government's share of the Optical segment closing adjustment. PX 25. In its certified claim, Raytheon asserted a government participation percentage of 96.89 percent based upon total government participation in all cost- and fixed-type contracts for the year 1991, when Hughes owned the Optical segment and an employer contribution was identified as having been made to the Nonbargaining plan. Id. The government contracting officer denied Raytheon's certified claim in its entirety by a contracting officer's final written decision dated February 1, 2005. PX 26. The reason stated by the contracting officer for denying Raytheon's certified claim was Raytheon's failure to fund the pension costs in the current tax year pursuant to FAR 31.205-6(j)(1)(i) and (j)(2)(i)(A). Id. at .0002.⁹⁵

At trial, Raytheon supported its segment closing adjustment claim for Optical through its expert, Mr. Vernon. Mr. Vernon's final calculations for the Nonbargaining plan and the Optical segment were slightly different from Mercer's calculations and are set forth on the chart below:

Pension Plan	Surplus/(Deficit)
Raytheon Nonbargaining	(\$8,972,581)
Total Optical Segment Closing Adjustment	(\$8,972,581)

⁹⁵ Although the government knew of a potential surplus arising from the Optical segment closing as set forth in the Mercer submission, the surplus was never identified in the contracting officer's decision. In other words, the decision did not include any finding that Raytheon was indebted to the government. See 48 C.F.R. 33.211(a)(4)(vi).

PX 428.0035, .0054; see also PX 18.0003. With regard to the government share of the Optical segment closing deficit, Raytheon presented evidence to show the following totals:

	A. Government Participation Numerator	B. Government Participation Denominator	C. Government Share Percentage (A/B)	D. Surplus/ (Deficit) Amount	Total Government Share Surplus/ (Deficit) (C x D)
Nonbargain- ing	\$53,456,151.00	\$55,172,000.00	96.8900003625%	(\$8,972,581.00)	(\$8,693,533.76)
Optical – Total					(\$8,693,533.76)

PX 428.0035, .0054; see also PX 25.

The government challenged Raytheon’s segment closing adjustment for the Optical segment with testimony from its expert, Mr. England. Mr. England challenged the data and assumptions used by Raytheon to calculate pension assets and liabilities. He testified that in his opinion Raytheon’s Optical segment closing adjustment should reflect a surplus of \$20,431,049, as set forth on the chart below:

Pension Plan	Surplus/(Deficit)
Raytheon Nonbargaining	\$20,431,049
Total Optical Segment Closing Adjustment	\$20,431,049

DX 241.0005; Tr. 1973, 2013, 2024-2026 (England). In brief, Mr. England testified that Raytheon erroneously relied on the (c)(5)(i) method because Raytheon did not have “readily determinable” data to support its asset allocation for the entire segment and thus Raytheon should have used the (c)(5)(ii) method to determine the pension assets

attributable to the Optical segment. Tr. 1990-2002 (England). He also testified that Raytheon, in its calculations, erred by failing to include more than five inactive participants attributable to the Optical segment. Tr. 1973-90 (England). Finally, he testified that Raytheon erred in excluding the surplus attributable to employee contributions from the pension asset calculation. Tr. 2004, 2007-12 (England).

The government also challenged Raytheon's government share calculations. The government presented testimony and evidence to show that the government's share of the Optical segment closing surplus is 48.37 percent, or \$9,882,498:

Plan (1)	Surplus/ (Deficit) (2)	Government Share Percentage (3)	Government Share (4) = (2) x (3)
Raytheon Nonbargaining	\$20,431,049	48.37%	\$9,882,498
Optical – Total			\$9,882,498

See Def.'s Post-Trial Br. 54, 80-84.

The court will first address the parties' specific disputes with respect to the calculation of assets and liabilities that gives rise to Raytheon's Optical segment closing adjustment claim. It will then turn to the remaining Optical segment-related issues.

2. Standard of review

In its analysis of Raytheon's compliance with the CAS, the court will be guided by the same principles it followed in reviewing Raytheon's AIS claim. See supra Part III.A.2. First, the court reviews the contracting officer's decision de novo. Second, the burden of proof is on the government to establish that Raytheon's segment closing calculation violated the CAS. Third, in evaluating Raytheon's compliance with the CAS, the court will look to the language of the CAS and any guidance issued by the CAS

Board. And finally, to the extent the CAS Board has not offered any specific guidance, the court will consider how various experts, including government agencies, have applied its terms, recognizing that there may be more than one correct approach to a CAS calculation.

3. Raytheon erred as a matter of law in failing to follow CAS 413-50(c)(12)(ii) in allocating pension assets to the Optical segment

Whether Raytheon is entitled to collect on any adjustment of previously determined pension costs in connection with the Optical segment closing turns on whether the segment closing adjustment for the Optical segment involves a pension deficit or pension surplus. The outcome of this question depends on whether Raytheon correctly followed the requirements for asset allocation set forth in CAS 413-50(c)(12)(ii), which requires a contractor performing segment closing calculations on a composite plan to follow one of the methodologies prescribed in CAS 413-50(c)(5). In particular, the court must determine whether Raytheon properly applied CAS 413-50(c)(5)(i) when it elected to treat the post-1990 Nonbargaining plan noncontributory participants differently from the pre-1990 Nonbargaining plan contributory participants.

Raytheon contends that its reliance on (c)(5)(i) was proper because it possessed a data point from which it “readily determin[ed]” the “necessary data” required to identify the assets contributed by (and therefore allocable to) the Optical segment to the Nonbargaining plan as a whole. Raytheon supports this contention with Mr. Vernon’s analysis of the Optical segment asset allocation. Mr. Vernon’s allocation of assets to the Optical segment is based on undisputed evidence showing the \$55,172,000 contribution

to the Nonbargaining plan by Hughes in the plan year beginning December 1, 1991. Mr. Vernon conceded that there were no data available to determine pension contributions from the beginning of the plan in 1951. Tr. 1638 (Vernon). However, Mr. Vernon stated, based on the \$55,172,000 contribution, that he was able to determine the pension asset share allocable to the noncontributory plan participants in the Optical segment and the share allocable to the contributory plan participants in the Optical segment. It is not disputed that the Nonbargaining plan is a single plan and uses the same pot of money to pay defined benefits to both noncontributory participants and contributory plan participants; nonetheless, Mr. Vernon assumed for purposes of the segment closing calculation that contributions to the plan should be treated separately. He assumed, as did Mercer, that the \$55,172,000 contribution was for the benefit and use of the noncontributory participants alone.⁹⁶ Mr. Vernon then subtracted this amount (with his additional calculations for the adjustments required under (c)(5)(i)⁹⁷) from the total assets

⁹⁶ In his July 2010 report, Mr. Vernon states that the \$55,172,000 contribution “would have been allocable to both Contributory and Noncontributory participants who were in the plan year as of December 1, 1991. However, we do not have data as of that plan year to be able to precisely split those contributions between two types of participants. Thus, we adopted a reasonable alternative approach.” PX 18.0011. Under Mr. Vernon’s approach, all of the \$55,172,000 contribution was allocated to the noncontributory participants. PX 18.0011-.0012.

⁹⁷ In his attempt to make the required (c)(5)(i) adjustments, Mr. Vernon did not provide any evidence or data, apart from data for the Nonbargaining plan as a whole, from which to determine the income received on the \$55,172,000 “noncontributory contribution” of assets or regarding specific benefits and expenses paid from such “noncontributory” assets. See CAS-413(50)(c)(5)(i) (“If the necessary data are readily determinable, the funding agency balance to be allocated to the segment shall be the amount contributed by, or on behalf of, the segment, increased by income received on such assets, and decreased by benefits and expenses paid from such assets.”) (emphasis added). Mr. Vernon calculated the amount of growth and expenditures from the \$55,172,000 contribution based on the rate of growth of the Nonbargaining plan assets as a whole. PX 18.0012 (“In other words, we assumed that the \$55,172,000 in contributions

in the Nonbargaining plan and attributed all of the remaining assets in the Nonbargaining plan to the plan's contributory participants. To determine the assets in the Nonbargaining plan allocable to the Optical segment noncontributory plan participants he took a ratio of segment liabilities to plan liabilities for noncontributory participants and multiplied it against the plan assets he had found for noncontributory participants. For the contributory plan participants, Mr. Vernon explained that he also applied a ratio of segment liabilities to plan liabilities for contributory participants and multiplied it against the plan assets he had found for contributory participants (i.e., all plan assets less the amounts he attributed to the noncontributory participants based on the \$55,172,000 contribution). Tr. 1778 (Mr. Vernon testified he used "the ratio of the ongoing liabilities for Optical divided by the ongoing liabilities for the total plan."). Although this method is the same method identified in (c)(5)(ii), Mr. Vernon explained that he did not use (c)(5)(ii), but a ratio of segment liability to plan liability against the plan assets he had found for each class of participants. Tr. 1778-79 (Vernon). Mr. Vernon acknowledged that he was not able to determine the precise earnings, benefit payments, or plan expenses attributable to either the noncontributory or contributory participants who were part of the

changed at the same rate as the remainder of the assets."). Mr. Vernon then subtracted this amount, approximately \$60 million (which he attributed to noncontributory participants in the entire plan), from the total asset amount for the Nonbargaining plan (approximately \$4 billion) to identify the asset value he attributed to contributory participants in the entire plan as of the segment closing date. In order to then allocate a share of those amounts for each class of participants to the Optical segment, Mr. Vernon used the same approach as Mercer (using a ratio of segment liabilities to plan liabilities for each class of participant against the plan assets he had found for each class of participant). PX 18.0010 ("Mercer provided updated values for ongoing liabilities which we used to redetermine the allocation of assets between the Contributory and Noncontributory components of the plan, and the assets allocable to Optical at segment closing.").

Optical segment. Tr. 1804-06 (Vernon). He further acknowledged that (c)(5)(i) requires adjustments based on these data. Tr. 1633 (Vernon) (“What we did was say as of the 1992 plan year, that was \$55,[172],000. We needed to bring that forward to the segment closing date. What we assumed was that that amount grew at the same rate as the total plan reflecting benefit payments out, investment earnings, expenses, employee contributions going in.”).

Mr. Vernon testified, based on his calculations for both the noncontributory and contributory participants in the Nonbargaining plan, that there was a plan deficit for noncontributory participants and a surplus for the contributory participants. As with Mercer, this result was dictated by his apparent assumption that the \$55,172,000 contribution was to pay benefits for noncontributory participants only and that these participants are paid only from that contribution. He also found that the surplus for the contributory participants was due to the historic contributions made by Hughes (and the government) to the plan starting in 1951. In combining these totals, he determined that the assets allocable to the Optical segment from the Nonbargaining plan result in an overall pension deficit of \$8,693,533.76 for the Optical segment.

The government contends that Raytheon’s segment closing adjustment, which leads to an overall pension deficit for the Optical segment, does not comport with (c)(5)(i) because the “necessary data” were not “readily determinable for certain prior periods,” and that in such circumstances, Raytheon was required by the CAS to use CAS 413-50(c)(5)(ii) to determine the Optical segment’s share of pension plan assets. The government explains that under (c)(5)(i), the following “necessary data” must be “readily

determinable”: the “amount contributed by, or on behalf of, the segment” to the plan at issue, “the income received on such assets,” and “benefits and expenses paid.” See CAS 413-50(c)(5)(i). If these data are not readily determinable “for certain prior periods” then (c)(5)(ii) mandates that “the market value of the assets of the pension plan shall be allocated to the segment as of the earliest date such data are available. Such allocation shall be based on the ratio of actuarial accrued liability of the segment to the plan as a whole” CAS 413-50(c)(5)(ii). The government argues that Raytheon’s asset allocation approach violated the CAS because Raytheon’s expert admitted that he did not have sufficient data to determine income earned, or benefits and expenses paid for any periods or for any plan participants, and therefore he was not able to perform the analysis identified in (c)(5)(i). Indeed, Raytheon’s expert admitted that for the contributory portion of the Nonbargaining plan he relied on the same ratio as identified in (c)(5)(ii) to find the portion of Nonbargaining plan assets attributable to contributory plan participants for the Optical segment. In such circumstances, the government argues, Raytheon was required to follow (c)(5)(ii) for the entire segment. It is of course not disputed that if (c)(5)(ii) is followed for the Optical segment closing adjustment, the calculation gives rise to a pension surplus and not a pension deficit for the Optical segment.⁹⁸

⁹⁸ The alternative segment closing adjustment calculation using only the (c)(5)(ii) method prepared by Mercer and submitted to the government found a surplus of \$11,438,570. PX 78.0005; Tr. 809, 811 (Winer). The government’s expert, Mr. England, testified that using the (c)(5)(ii) method would reduce the deficit proposed by Raytheon (of \$8,972,581) by \$16,227,882, resulting in a surplus position. Tr. 2024-26 (England).

The court agrees with the government that under the facts of this case, Raytheon did not have “readily determinable” the “necessary data” to employ the methodology in (c)(5)(i), and therefore Raytheon was required to use (c)(5)(ii) in allocating pension assets from the Nonbargaining plan for all participants (both contributory and noncontributory) to the Optical segment. First, even if it is appropriate in other circumstances to divide a single pension plan into parts based upon differences in the beneficiary scheme, the division in this case was not proper. CAS 413-50(c)(5)(i) is the preferred method for attributing pension assets to a segment only where there is sufficient “readily determinable” data available to support reasonable assumptions regarding the segment’s contribution to the pension asset base as a whole. Where, as here, (c)(5)(ii) had to be used because there were not readily determinable data for a large portion of the pension asset calculation, (c)(5)(ii) had to be used for the segment as a whole.

The reasons for rejecting Raytheon’s hybrid approach to CAS 413-50(c)(5) compliance is obvious in this case. To begin, by dividing the Nonbargaining plan between contributory and noncontributory participants, Raytheon ignored the significant pension surplus associated with the plan as a whole and created an artificial \$8,972,581 deficit in the Optical segment. Next, to the extent Raytheon had data regarding asset contributions (in the form of the \$55,172,000 contribution for a single plan year), it made assumptions in relying on that data which were contrary to fact. The evidence established that the Nonbargaining plan was fully-funded in 1991 and that thus there was no deficit created by changing the Nonbargaining plan from a contributory to noncontributory plan. In addition, the evidence established that the \$55,172,000

contribution went into the plan as a whole and therefore was used to help pay the benefits to both the noncontributory and contributory plan participants. Tr. 1627-28, 1633 (Vernon); PX 18.0011. In such circumstances, dividing the calculation between the two groups was not justified. Finally, once Raytheon recognized that it did not have “readily determinable” data to allocate any pension assets allocable to the contributory participants without resorting to the ratio established in (c)(5)(ii), and discovered that the plan had a significant pension surplus, Raytheon could not simply ignore those facts.

Based on the foregoing discussion, the court finds that Raytheon’s segment closing adjustment for Optical does not comport with CAS 413-50(c)(12). Therefore, Raytheon is not entitled to recover the government’s share of the deficit it calculated for its Optical segment closing claim. More specifically, the court finds that Raytheon’s Optical segment closing adjustment calculation does not comply with the CAS requirements for allocating assets from a single composite pension plan to the Optical segment found in CAS 413-50(c)(12)(ii) and CAS 413-50(c)(5). Raytheon’s calculation artificially divided the Nonbargaining plan’s pension plan assets and impermissibly mixed the (c)(5)(i) and (c)(5)(ii) methods. Moreover, it made assumptions in its (c)(5)(i) calculations that were contrary to the facts: Raytheon erroneously assumed that the noncontributory participants are not beneficiaries of the pension surplus in the Nonbargaining plan and then incorrectly created a separate and identifiable pension deficit attributable to the noncontributory participants in that plan. Where, as here, the government established that Raytheon relied on assumptions contrary to known facts and where the necessary data were not “readily determinable” for the segment as a whole, the

contractor was required to use the (c)(5)(ii) method for the entire calculation. For all of these reasons, Raytheon is not entitled to any recovery in connection with its claim for the Optical segment closing adjustment.

4. The court does not possess jurisdiction to determine and set-off any Optical segment pension surplus claimed by the government for the first time at trial

The court must now address whether it has jurisdiction to proceed further and decide, as asserted by the government for the first time at trial, whether the government is entitled to a set-off of any Optical CAS 413 segment closing adjustment surplus. The government asserts that the court has jurisdiction to enter a judgment determining and setting-off any such surplus against the CAS 413 segment closing deficits owed to Raytheon, as determined in the other CAS 413 segment closings at issue in this case. The government contends that if the court exercises jurisdiction and makes findings determining the government's share of any Optical segment pension surplus, the government would then be entitled to either a set-off in this case or to seek compensation in another venue.⁹⁹ The government contends that the court may simply decide, in the context of ruling on Raytheon's claim for an Optical pension deficit, to adopt as correct Mr. England's (c)(5)(ii) calculation, even in the absence of a pending government counterclaim. The government argues that because its common law right to a set-off

⁹⁹ In support of its argument, the government's cites only the Federal Circuit's decision in Johnson v. All-State Constr., 329 F.3d 848, 853 (Fed. Cir. 2003), recognizing the common law right to set-off. See id. ("Both the Supreme Court and this court have made clear that the government's set-off right can be defeated only by explicit [or contractual] language."); see also Cecile Indus., 995 F.2d at 1055 (finding the language of the Debt Collection Act "does not contain a clear mandate to abrogate or severely restrict the Government's common law contractual offset rights").

arises from the same set of operative facts underlying Raytheon's Optical CAS claim, this court can exercise its jurisdiction to set-off the amount owed to Raytheon with the Optical surplus.

Raytheon argues that the court does not have jurisdiction to reach the government's claim for a set-off, because there has been, to date, no final contracting officer's decision either asserting a government claim for payment or a finding that Raytheon is indebted to the government for any Optical segment closing surplus, as required under the CDA. In addition, Raytheon asserts that the government's claim, raised at trial more than six years after the Optical segment closing, also fails under the CDA's statute of limitations.¹⁰⁰ Raytheon argues that the government does not have a separate common law right to a set-off where, as here, the government had to first comply with the CDA.

For the reasons that follow, the court agrees with Raytheon, and holds that because the government's claim for the pension surplus as a set-off is governed by the CDA, and because the government did not comply with the CDA, the court does not have jurisdiction over the government's claim for a set-off based on the Optical segment closing adjustment surplus.

The "comprehensive procedures" of the CDA govern the resolution of contract disputes that arise between the government and contractors. Applied Cos., 144 F.3d at

¹⁰⁰ The statute of limitations applicable to a government claim is six years. 41 U.S.C. § 7103(a)(4)(A) (formerly codified at 41 U.S.C. § 605) ("[E]ach claim by the Federal Government against a contractor relating to a contract shall be submitted within 6 years after the accrual of the claim."); see also Raytheon Co. v. United States, No. 09-306C, 2012 WL 1072294, at *3 (Fed. Cl. Mar. 22, 2012).

1477-78; Cecile Indus., 995 F.2d at 1055. The Federal Circuit has recognized that the government's common law right to set-off may be limited by the government's compliance with the requirements set in the CDA. See Applied Cos., 144 F.3d at 1477-78; Joseph Morton Co., 757 F.2d at 1281 (holding government was required to raise its CDA counterclaims first through a contracting officer before government could assert them in Claims Court); see also 1-10 Indus. Assocs., LLC v. United States, 528 F.3d 859, 862 (Fed. Cir. 2008) (citing Joseph Morton Co., 757 F.2d at 1281); M. Maropakis Carpentry, 609 F.3d at 1331 (holding that the jurisdictional requirements of the CDA apply even when a claim is asserted as a defense).¹⁰¹ In addition, government claims for pension surpluses arising from segment closing adjustments under CAS 413 are subject to the requirements of the CDA. See, e.g., Johnson Controls World Servs., Inc. v. United States, 43 Fed. Cl. 589 (1999).¹⁰²

¹⁰¹ Under the precedent established in Applied Cos. and Joseph Morton Co., the government's contention that it has an independent right to a set-off in circumstances where the CDA applies is simply incorrect.

¹⁰² Though, as discussed in Part II.A.2., supra, the fact that a claim for a pension surplus or a pension deficit determined through a CAS 413 segment closing adjustment is a claim "relating to a contract" is not determinative of whether that same claim is contract-specific. Such a claim may, as provided for in CAS 413-50(c)(12)(vi)-(vii), be brought through any CAS-covered contract open at the time of segment closing. As the Federal Circuit held in Gates:

CAS 413 is unusual in that it does not require an analysis of individual contracts, but rather . . . affects all of the contractor's CAS-covered contracts. . . . The current period adjustment provided for under CAS 413, by its terms, represents an adjustment of previously-determined pension costs for the segment as a whole, and does not require an impact analysis of individual contracts within the segment. This adjustment is not contract specific, nor does it involve a cost adjustment of any individual contract.

Because the government's claim for a set-off based on the Optical pension surplus is governed by the CDA, the government must show either that it complied with the CDA or that it is exempt from obtaining an administrative decision from the contracting officer establishing Raytheon's liability for the surplus.

The CDA requires that "[a]ll claims by the government against a contractor relating to a contract shall be the subject of a decision by the contracting officer." 41 U.S.C. § 605(a)¹⁰³; see also Wilner v. United States, 24 F.3d 1397, 1403 (Fed. Cir. 1994) (en banc) (determining that in litigation under the CDA in the Court of Federal Claims, a contracting officer's final decision "is of course necessary to establish jurisdiction"). As set forth in the regulations, and recognized by the Federal Circuit, see England v. Sherman R. Smoot Corp., 388 F.3d 844, 856 (Fed. Cir. 2004), a contracting officer's decision is required to include five components:

"(i) [d]escription of the claim or dispute; (ii) [r]eference to the pertinent contract terms; (iii) [s]tatement of the factual areas of agreement and disagreement; (iv) [s]tatement of the contracting officer's decision, with supporting rationale;" and (v) a paragraph advising the contractor of its appeal rights and the requirements for filing an appeal.

Id. (citing 48 C.F.R. § 33.211(a)(4)(i)-(v)). Importantly, a contracting officer's decision must also include a demand for payment "in all cases where the decision results in a

Gates, 584 F.3d at 1069, 1069 n.8. Thus, consistent with the court's earlier decision that Raytheon's CAS 413 claims are not barred by virtue of its novation of certain specific CAS-covered contracts, Raytheon's CAS 413 claims are brought pursuant to the CDA through other of its CAS-covered contracts that were not novated.

¹⁰³ This provision of the CDA is currently codified at 41 U.S.C. § 7103(a)(3) ("Each claim by the Federal Government against a contractor relating to a contract shall be the subject of a written decision by the contracting officer.").

finding that the contractor is indebted to the Government.” Id. at 856 n.7; 48 C.F.R. § 33.211(a)(4)(vi).

The government acknowledges that it does not have a contracting officer decision finding Raytheon liable for a pension surplus in connection with the Optical segment closing in accordance with the decision criteria identified above. Rather, Raytheon presented a certified claim to the government seeking a determination that:

(1) [Raytheon’s] computation of the [Optical] segment closing adjustment complies with CAS 413-50(c)(12); (2) the Government’s share of the aggregate adjustment is \$13,816,382;¹⁰⁴ and (3) Raytheon is entitled to an upward adjustment of the price of the aforementioned contracts in the full amount of the Government’s share.

PX 25. The contracting officer denied Raytheon’s claim in a written decision, stating:

It is my final contracting officer decision that: (1) the proposal in the company’s November 8, 2004 letter does not comply with CAS 413; (2) the Government will not share in any portion of the pension deficit segment closing amount; and (3) Raytheon is not entitled to an upward adjustment to the price of contracts cited in your letter or any other contract(s) per CAS 413.50([c])(12)(vii).

PX 26. Therefore, the court cannot base its jurisdiction on any specific agency decision establishing Raytheon’s liability for the Optical segment surplus. See Wilner, 24 F.3d at 1403; Joseph Morton Co., 757 F.2d at 1281; 1-10 Indus. Assocs., 528 F.3d at 862.

In addition, the government cannot establish this court’s jurisdiction over its set-off claim on the grounds that the court has jurisdiction over Raytheon’s Optical claim. The fact that there was a decision on Raytheon’s claim does not excuse the government from having to provide its own contracting officer decision. Each specific claim has to

¹⁰⁴ This figure reflected both a \$9,261,669 pension deficit and a \$4,554,713 PRB deficit. PX 25.

have been the subject of a contracting officer decision. Joseph Morton Co., 757 F.2d at 1281.

The purpose of this requirement is to ensure that the contractor is on notice of its potential liability. Applied Cos., 144 F.3d at 1478 (explaining that the primary intent behind the CDA was to “create opportunities for informal dispute resolution at the contracting officer level and to provide contractors with clear notice as to the government’s position regarding contract claims”); Johnson Controls, 43 Fed. Cl. at 592 (“A valid claim must give adequate notice by specifying the basis and amount of liability.”). Here, Raytheon did not have notice of the government’s claim to a pension surplus in connection with the Optical segment closing until trial. To the contrary, the DCMA CIPR Center initially approved, and the DCAA did not take exception to, Raytheon’s pension deficit calculation for the Optical segment, except insofar as it included a deficit for PRBs. PX 108; PX 110. Raytheon would have had no reason to suspect that the government would later seek a set-off. Indeed, there was no suggestion by any government official that Raytheon might owe the government a payment following the Optical segment closing. Thus, Raytheon did not have any notice of the government’s claim, contrary to the requirements of the CDA.

Finally, the decisions of the Fifth and Seventh Circuits in United States v. Renda Marine, Inc., 667 F.3d 651 (5th Cir. 2012) and United States v. T & W Edmier Corp., 465 F.3d 764 (7th Cir. 2006), which identify circumstances where the government is not required to obtain a contracting officer decision, do not excuse the government’s failure to obtain a contracting officer decision in this case. In Renda Marine and Edmier, the

Fifth and Seventh Circuits decided that the CDA does not require the government to obtain its own administrative decision where a court or board determines that a contractor has been awarded too much by the contracting officer and the government seeks to recoup its overpayment on the contractor claim in a separate case. In that situation, the courts correctly held that the government is not asserting its own claim but is seeking to recover a portion of the amount overpaid on the contractor's claim and thus the contractor's claim (and contracting officer's subsequent decision) satisfies any CDA requirement. Here, of course, the government is seeking to set-off the amount it owes Raytheon for two other CAS 413 claims (for the AIS and Aerospace segments) with a government claim for payment under CAS 413 (for the Optical segment). Thus, this case does not involve collection of a contractor overpayment following a contracting officer's decision, where a separate government CDA claim is not required.

In sum, because the government needed a CDA decision in order to obtain payment from Raytheon for the Optical pension surplus and failed to obtain one, and because the court cannot find any reason for excusing the government's failure to comply with the CDA's jurisdictional requirements, this court will not exercise jurisdiction over the government's claim for a set-off of the pension surplus arising from the Optical segment closing. Accordingly, the court does not reach the government's additional arguments relating to the proper calculation of the Optical segment closing adjustment and the government's share thereof.

C. PWF was not a “segment” within the meaning of CAS 413-30(a)(19) and therefore its sale did not trigger the need for a segment closing adjustment

As previously discussed, the evidence at trial established that Raytheon underwent a period of restructuring following its merger with Hughes, TI, CTAS, and E-Systems in the 1990s. As a part of this restructuring, Raytheon set up internal service centers known as the “Centers of Excellence” that specialized in the production of a particular product for use by Raytheon’s other businesses. Tr. 376-77 (Cann) (“The Centers of Excellence were assigned to certain segments for management purposes, and they produced Printed Wire Fabrication, printed wiring boards, CCA would have been Circuit Card Assembly, and MF would have been Metal Fabrication.”). One of the businesses within the Centers of Excellence was the PWF business, which was responsible for producing printed wire circuit boards used in Raytheon’s aerospace and defense businesses. See Tr. 239, 245-46 (Murphy); Tr. 377 (Cann). Raytheon sold PWF to Tyco Printed Circuit Group LP (“Tyco”) on April 21, 2001. PX 28.

On November 8, 2004, Raytheon submitted a certified claim to the government for the government’s participation in a pension deficit it calculated for the alleged PWF segment. Id. As with Raytheon’s claims arising out of the AIS and Optical segment closings, the government contracting officer denied Raytheon’s certified claim in its entirety by a contracting officer’s final written decision dated February 1, 2005. PX 29. The reason stated by the contracting officer for denying Raytheon’s certified claim was Raytheon’s failure to fund the pension costs in the current tax year pursuant to FAR 31.205-6(j)(1)(i) and (j)(2)(i)(A). Id.

At trial, Raytheon presented evidence to support its claim for the government's participation in a PWF segment closing adjustment in the amount of \$1,419,507.10, based on composite calculations performed on the two pensions plans—the RTIS and Nonbargaining plans—with participants in the alleged PWF segment.

The government challenges Raytheon's claim based on evidence that demonstrates PWF did not meet the definition of a "segment" under CAS 413-30(a)(19) and therefore, no segment closing adjustment was triggered by the sale of PWF to Tyco. The government also challenges Raytheon's segment closing adjustment for the alleged PWF segment on the merits with testimony from its expert, Mr. England.

The court will first address its findings with regard to whether the PWF business meets the definition of a segment under the CAS. CAS 413 defines the term "segment" as follows:

Segment means one of two or more divisions, products departments, plants, or other subdivisions of an organization, reporting directly to a home office, usually identified with responsibility for profit and/or producing a product or service.

CAS 413-30(a)(19).

The government argues that the evidence at trial made clear that the PWF business unit was not a segment within the meaning of CAS 413-30(a)(19). First, the government points to the fact that the limited evidence presented established that PWF was one of three internal service centers, which reported to a home office as a part of a Centers of Excellence reporting unit. PX 28.0002 (Raytheon's certified claim identifying PWF as "an internal service center"); Tr. 238-239 (Murphy) ("PWF was part of the Centers of

Excellence which, in fact, reported to defense systems as a home office. . . . I cannot sit here and tell you what the organizational reporting relationship was in actuality. I don't know.") (emphasis added). There was no evidence introduced to show that PWF itself reported directly to a home office. Second, the government relies on testimony to show that PWF never had any CAS contracts or subcontracts of its own and thus the government never directly reimbursed PWF for its pension costs. Tr. 223, 241 (Murphy). Pension costs for work done by the PWF unit were instead allocated to the CAS-covered contracts of other parts of Raytheon. Tr. 406 (Cann); Tr. 239-40 (Murphy) (PWF pension costs were not allocated to any PWF contracts or subcontracts). Thus, there would have been no reason to treat it as a segment under the CAS. Finally, the government points to Raytheon's admission in its CAS disclosure statement, PX 426.0001, .0017, that PWF was one of three units that were part of the "Centers of Excellence" that reported to Electronic Systems as a home office. The government asserts this further demonstrates that PWF was not a segment because CAS regulations require that "[w]hen a Disclosure Statement is required, a separate Disclosure Statement must be submitted for each segment whose costs included in the total price of any CAS-covered contract or subcontract exceed [a threshold amount.]" 48 C.F.R. § 9903.202-1(c).

Raytheon argues in response that PWF is a segment because the government treated it as a segment when the government required Raytheon to submit a CAS 413

segment closing adjustment following the sale of PWF.¹⁰⁵ Raytheon further relies on the testimony of Mr. Cann, Raytheon's Assistant Controller for Government Accounting, to assert that the existence of a disclosure statement shows that PWF was a segment. The reason only one CAS disclosure statement was filed for three Centers of Excellence, Raytheon explains, was because, "the accounting practices weren't different for each of the segments listed" Tr. 381-83 (Cann). Raytheon asserts that a single disclosure statement was filed, rather than three, for convenience purposes. Finally, Raytheon argues that the fact that PWF did not itself hold any government contracts or subcontracts is not conclusive in determining its status as a segment. Raytheon argues that a "government share" under CAS 413-50(c)(12)(vi) can be calculated by examining the costs allocated to PWF that were charged through other contracts and subcontracts.¹⁰⁶ For all of these reasons, Raytheon urges the court to conclude that PWF was a segment within the meaning of CAS 413-30(a)(19).

¹⁰⁵ The DCAA issued an audit report on April 18, 2001, finding Raytheon in noncompliance with CAS 413-50(c)(12) for not having submitted its segment closing calculation for the PWF segment. PX 64. After Raytheon submitted its segment closing calculation, the contracting officer asked the CIPR Center and the DCAA to review the submission, and both agencies issued reports. See PX 120; PX 267. Prior to trial, the reviewing agencies did not raise the issue that PWF might not be a segment within the meaning of the CAS.

¹⁰⁶ The Government's share of the adjustment amount determined for a segment shall be the product of the adjustment amount and a fraction. . . . The numerator of such fraction shall be the sum of the pension plan costs allocated to all contracts and subcontracts (including Foreign Military Sales) subject to this Standard during a period of years representative of the Government's participation in the pension plan. The denominator of such fraction shall be the total pension costs assigned to cost accounting periods during those same years.

CAS 413-50(c)(12)(vi).

Based on the evidence presented at trial, the court agrees with the government that the PWF business was not a segment within the meaning of CAS 413-30(a)(19). First, Raytheon did not produce evidence to show that PWF met the definition set forth in the CAS. Raytheon did not present any testimony or evidence to show that PWF ever “report[ed] directly to a home office” as required by the CAS 413-30(a)(19). Second, as the government correctly observes, the only reference to PWF found in the CAS disclosure statement submitted by Raytheon identifies PWF as part of a segment and not as a segment on its own. PX 426.0001, .0017. Raytheon’s CAS disclosure statement clearly designates “Centers of Excellence” as the “Company or Reporting Unit” and later as the “[s]egment or business unit reporting directly to a home office.” PX 426.0001. The disclosure statement identifies PWF among the individual businesses listed within an “Item Description” of the “Reporting Unit.” PX 426.0017. Therein, PWF was listed as among the “Corporate Service Centers aligned to ES [Electronic Systems].” Id.; see also PX 28.0002 (Raytheon’s certified claim identifying PWF as “an internal service center”). Thus, Raytheon itself apparently recognized that PWF was not an individual segment.

Taken together, the court finds that the evidence weighs in favor of the government’s position and that the government has met its burden in establishing that PWF was not a segment. Accordingly, the sale of PWF to Tyco should not have triggered a segment closing adjustment. Raytheon’s claim for payment of the

government's share of the pension deficit identified for PWF in Raytheon's segment closing adjustment must be rejected.¹⁰⁷

D. Aerospace segment closing calculations

On June 8, 2001, Raytheon sold the Aerospace segment to Veritas Capital. PX 33. The parties agree that under CAS 413-30(a)(20) the June 8, 2001 sale resulted in a "segment closing" requiring Raytheon to perform CAS 413-50(c)(12) segment closing calculations for each of the Aerospace segment's defined benefit pension plans. There were two Raytheon defined benefit pension plans covering Aerospace segment employees: 1) Raytheon Aircraft Company Retirement Income Plan for Salaried Employees and 2) Raytheon Aircraft Holdings Base Retirement Plan.

On January 24, 2005, Raytheon submitted a certified claim to the government for the government's participation in the pension deficit Mercer had calculated for the Aerospace segment. PX 33. As with Raytheon's claims arising out of the AIS and Optical segment closings, the government contracting officer denied Raytheon's certified claim in its entirety by a contracting officer's final written decision dated March 7, 2005.

¹⁰⁷ The government also correctly observes that Raytheon itself recognized that PWF "had no contracts of its own and no sales records to determine the amount of the Government's share." PX 28.0003. In its certified claim, and at trial, it was admitted that Raytheon had no evidence, beyond an e-mail documenting a phone call from the Raytheon Director of Finance Shared Services, an individual who did not testify at trial, "estimat[ing] that government participation would have been 95% plus." PX 27; PX 28.0003. While PWF was apparently responsible for manufacturing printed circuit boards and making intra-company transfers of those boards to other parts of Raytheon, Raytheon has produced no evidence on which to base a determination of the government's share of any pension costs associated with that work. Accordingly, even if the court were to decide that PWF was a segment requiring a CAS 413 segment closing adjustment, Raytheon could not support its government share calculations. Therefore, its claim for the government's participation in a share of any pension deficit that may have existed in the PWF segment must also fail for this reason.

PX 34. The primary reason stated by the contracting officer for denying Raytheon's certified claim was Raytheon's failure to fund the pension costs in the current tax year pursuant to FAR 31.205-6(j)(1)(i) and (j)(2)(i)(A). Id.¹⁰⁸

Raytheon then filed its claim in the Court of Federal Claims and sought the government's participation in the following segment closing adjustment deficit:

Pension Plan	Surplus/(Deficit)
Raytheon Aircraft Company Retirement Income Plan for Salaried Employees	(\$5,068,177)
Raytheon Aircraft Holdings Base Retirement	(\$1,058,192)
Total Aerospace Segment Closing Adjustment	(\$6,126,369)

PX 428.0041. The court previously held that the government could not challenge Raytheon's asset and liability segment closing adjustment calculations for these two plans in the Aerospace segment because of the government's judicial admission to the court that those calculations were not in dispute. See Order on Mot. to Strike, Dec. 14, 2010, ECF No. 199.

Therefore, the only issue remaining concerning the Aerospace segment closing is the proper calculation of the government's share of the Aerospace pension deficit. In the same manner as previously discussed for the AIS segment, Raytheon has performed a government share calculation based on sales data for the Aerospace segment as follows:

¹⁰⁸ The contracting officer also noted that the government also questioned Raytheon's reliance on sales data to determine the government share, stating as follows:

Although a moot point because the Government has no intention of sharing in this pension deficit adjustment, the Government sees nothing in CAS 413-60(c)(9) that allows the use of CAS-covered sales as a proxy for pension plan costs in determining the amount of the Government's share.

Id.

	A. Government Participation Numerator	B. Government Participation Denominator	C. Government Share Percentage (A/B)	D. Surplus/ (Deficit) Amount	Total Government Share Surplus/ (Deficit) (C x D)
Raytheon Aircraft Salaried	\$2,253,977.00	\$5,073,491.00	44.4265496874%	(\$5,068,177)	(\$2,251,616.17)
Raytheon Aircraft Base	\$3,899,351.00	\$6,054,361.00	64.4056573435%	(\$1,058,192)	(\$681,535.51)
Aerospace – Total					(\$2,933,151.69)

PX 428.0054; PX 33.

The government contends that Raytheon's Aerospace segment government share calculations must be rejected because Raytheon failed in its calculations to account for pension costs that were paid in connection with fixed price contracts between 1978 and 1995, when the original CAS was in effect. The government argues that it is entitled to an equitable adjustment removing these amounts from the amounts owed to Raytheon in connection with the Aerospace segment closing. The government has offered no alternative government share calculation of its own for the Aerospace segment. For the reasons stated previously, supra Part III.A.4.b., despite its earlier ruling that the government is entitled to an equitable adjustment through the exclusion of pension costs allocated to firm fixed price contracts subject to the original CAS 413, the court must conclude that it does not have jurisdiction over the government's equitable adjustment claim for the Aerospace segment.

Accordingly, the court finds that the government's share of the Aerospace segment closing adjustment is **\$2,933,151.69**.

IV. Conclusion

For the foregoing reasons, the court finds that Raytheon's claims for the AIS and Optical segments are not barred by the AIS and Optical novation agreements and that Raytheon is entitled to the following government share amounts on its segment closing adjustment claims:

1. AIS Segment:	\$56,276,815.61 plus interest pursuant to 41 U.S.C. § 7109(a)(1)
2. Optical Segment:	\$0.00
3. Alleged PWF Segment:	\$0.00
4. Aerospace Segment:	\$2,933,151.69 plus interest pursuant to 41 U.S.C. § 7109(a)(1)

Because the government has not provided a contracting officer's decision on its claims for an equitable adjustment or for a set-off, the court also finds that it does not possess jurisdiction over those claims, and therefore the government is not awarded any monetary relief in this case. Accordingly, the court directs the Clerk to enter judgment for Raytheon in the amount of **\$59,209,967.30 plus interest pursuant to 41 U.S.C. § 7109(a)(1).**¹⁰⁹ Each party shall bear its own costs.

IT IS SO ORDERED.

s/Nancy B. Firestone
NANCY B. FIRESTONE
Judge

¹⁰⁹ As explained by the court in General Motors Corp., 66 Fed. Cl. at 159, Raytheon will be required to apply the judgment to the pension deficits identified above to the extent sufficient contributions have not been made by Raytheon in the years following the AIS and Aerospace segment closings to cover these pension deficits.